WATER POLLUTION ABATEMENT PLAN MODIFICATION

FOR

AGUDAS ACHIM SUBDIVISION, UNIT 2

Prepared For:

CONGREGATION AGUDAS ACHIM

Job No. 1422-014-039

December 2019

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2-11-20

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Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

Administrative Review

1. Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.

   To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

   An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains “possibly sensitive” features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: AGUDAS ACHIM SUBDIVISION UNIT 2						**2. Regulated Entity No.:** 102749561			
3. Customer Name: CONGREGATION AGUDAS ACHIM						**4. Customer No.:** 603673385			
5. Project Type: **(Please circle/check one)**	New		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**		8.3	
9. Application Fee:	$5,000.00		**10. Permanent BMP(s):**			Filtration Basin			
11. SCS (Linear Ft.):			**12. AST/UST (No. Tanks):**			N/A			
13. County:	Bexar		**14. Watershed:**			Salado Creek			

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%20GWCD%20map.pdf

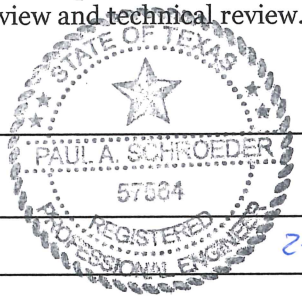
For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	__
Region (1 req.)	__	__	__
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence __Georgetown __Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

9/21/18-PER ELAINE GROSENHEIDER, PROVIDE AN ORIGINAL MARKED "ORIGINAL" AND 1 COPY. ALSO PROVIDE A COMPLETE PDF OF THE ENTIRE BOOKLET ON A THUMB DRIVE OR CD. THE PDF MUST BE EXACTLY THE SAME AS THE HARD COPY

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	X	__	__	__	__
Region (1 req.)	X	__	__	__	__
County(ies)	X	__	__	__	__
Groundwater Conservation District(s)	X Edwards Aquifer Authority X Trinity-Glen Rose	__Edwards Aquifer Authority	__Kinney	__EAA __Medina	__EAA __Uvalde
City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park X San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch __Garden Ridge __New Braunfels __Schertz	NA	__San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.
Paul A. Schroeder, PE, RPLS Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent Date 2-11-20



FOR TCEQ INTERNAL USE ONLY				
Date(s)Reviewed:		Date Administratively Complete:		
Received From:		Correct Number of Copies:		
Received By:		Distribution Date:		
EAPP File Number:		Complex:		
Admin. Review(s) (No.):		No. AR Rounds:		
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee Check:	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):			Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

General Information Form

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B) Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **General Information Form** is hereby submitted for TCEQ review. The application was prepared by:

Print Name of Customer/Agent:

Paul A. Schroeder, PE, RPLS

Date: 12-5-19

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: Agudas Achim Subdivision Unit 2
2. County: Bexar
3. Stream Basin: Salado Creek
4. Groundwater Conservation District (If applicable): Trinity Glen Rose Water Conservation District
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

☒ WPAP
☐ SCS
☒ Modification
☐ AST
☐ UST
☐ Exception Request

7. Customer (Applicant):

Contact Person: Linda Moad
Entity: Congregation Agudas Achim
Mailing Address: 16550 Huebner Road
City, State: San Antonio, Texas Zip: 78248
Telephone: (210) 479-0307 FAX: _____
Email Address: linda.moad@agudas-achim.org

8. Agent/Representative (If any):

Contact Person: Paul A. Schroeder, PE, RPLS
Entity: Vickrey & Associates, Inc.
Mailing Address: 12940 Country Parkway
City, State: San Antonio, Texas Zip: 78216
Telephone: (210) 349-3271 FAX: _____
Email Address: pschroeder@vickreyinc.com

9. Project Location:

☒ The project site is located inside the city limits of San Antonio.
☐ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
☐ The project site is not located within any city's limits or ETJ.

10. ☒ The location of the project site is described below. The description provides sufficient detail and clarity so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

16550 Huebner Road, San Antonio, Texas 78248

11. ☒ **Attachment A – Road Map**. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

12. ☒ **Attachment B - USGS / Edwards Recharge Zone Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:

☒ Project site boundaries.
☒ USGS Quadrangle Name(s).
☒ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
☒ Drainage path from the project site to the boundary of the Recharge Zone.

13. ☒ **The TCEQ must be able to inspect the project site or the application will be returned**. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate

the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.

☒ Survey staking will be completed by this date: 02/01/2020

14. ☒ **Attachment C – Project Description**. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

☒ Area of the site
☒ Offsite areas
☒ Impervious cover
☒ Permanent BMP(s)
☒ Proposed site use
☒ Site history
☒ Previous development
☒ Area(s) to be demolished

15. Existing project site conditions are noted below:

☒ Existing commercial site
☐ Existing industrial site
☐ Existing residential site
☒ Existing paved and/or unpaved roads
☐ Undeveloped (Cleared)
☒ Undeveloped (Undisturbed/Uncleared)
☐ Other: _____

Prohibited Activities

16. ☒ I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

(4) The use of sewage holding tanks as parts of organized collection systems; and

(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. ☒ I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

(2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

18. The fee for the plan(s) is based on:

☒ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
☐ For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
☐ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
☐ A request for an extension to a previously approved plan.

19. ☒ Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

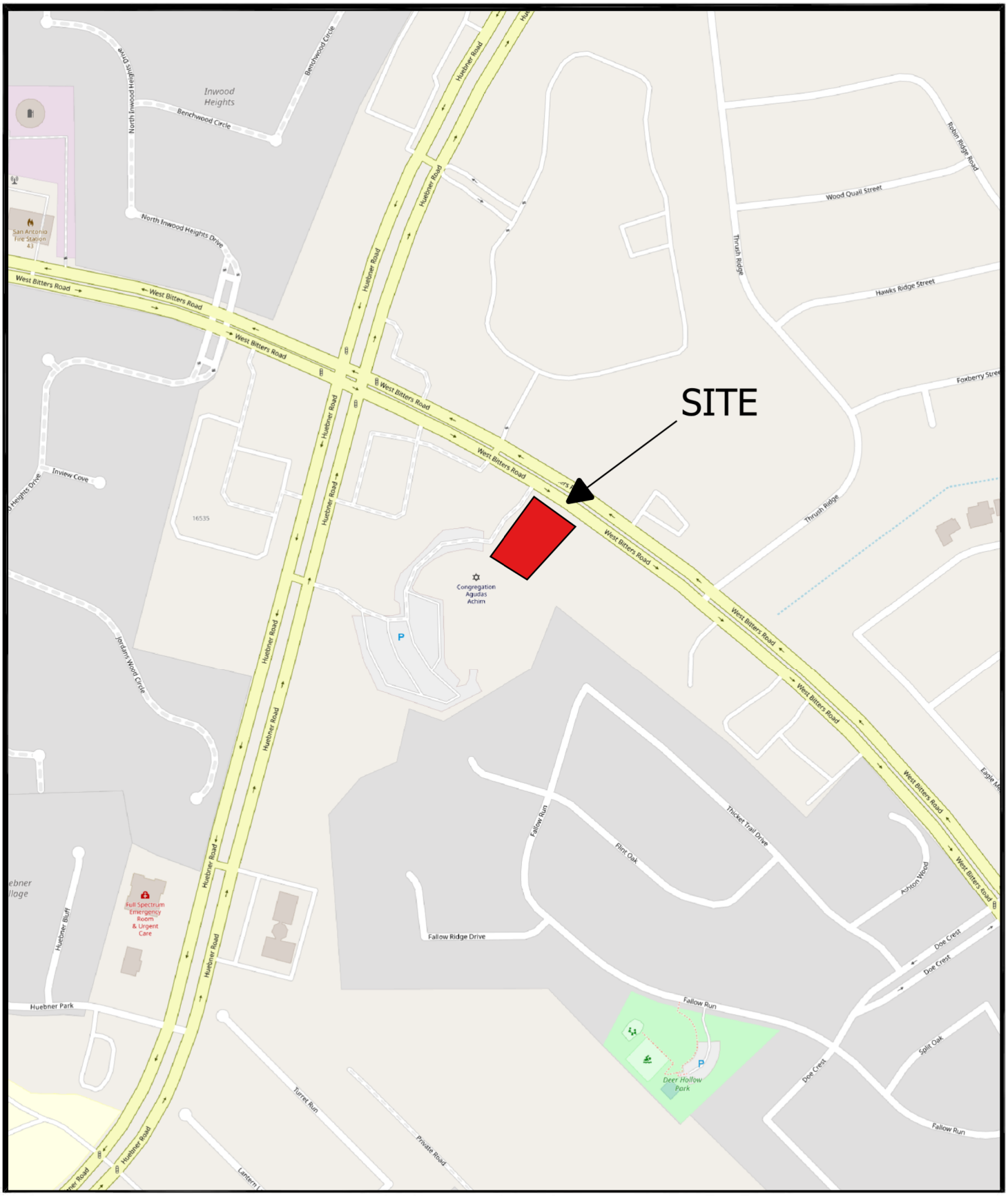
☐ TCEQ cashier
☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
☒ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

ATTACHMENT A

ROAD MAP



AGUDAS ACHIM

WPAP MODIFICATION

Location Map Exhibit

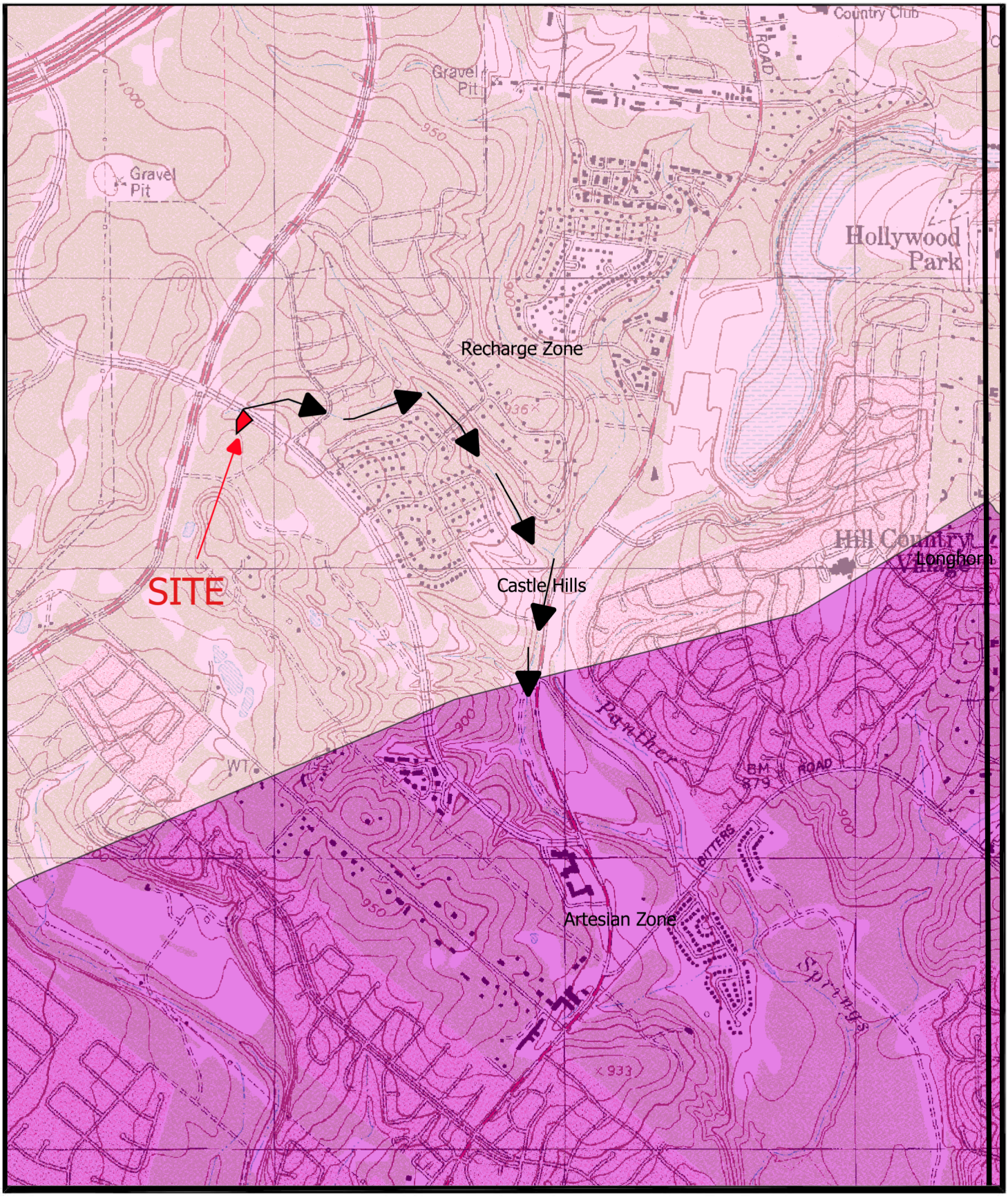
ATTACHMENT: A DATE: 12/6/2019

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271
Firm Registration No.: F-159

Nov 26, 2018 - 11:18am
P:\STANDARD\VATITLE\Vo8x11 EXH.dwg

ATTACHMENT B

USGS QUADRANGLE MAP



ADUGAS ACHIM

QUAD MAPS:

CASTLE HILLS

ATTACHMENT: B DATE: 12/06/2019

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271
Firm Registration No.: F-159

GENERAL INFORMATION FORM
ATTACHMENT C
PROJECT DESCRIPTION

The project is a modification of an existing WPAP for Congregation Agudas Achim at 16550 Huebner Road, in north San Antonio, Texas. The existing facilities are a worship facility, related parking, and support structures. These facilities are treated by a sand filter basin and vegetative filter strips. The modification is for the addition of a youth center/classroom building of approximately 2200 square feet and 414 square feet of additional impressive cover. The additional cover consists of sidewalk and a filtration basin. The improvements are proposed on 0.32 acres of land which is included in the original WPAP (8.3 acres) as undeveloped. A portion of the 0.32-acre drainage area is currently shown as native vegetative filter strip. With the exception of a 20' wide by 60' long strip that will be disturbed during construction and will contain a proposed sidewalk, the existing vegetative filter strip will remain as it exists. The project area is currently draining away from other existing facilities and does not drain toward an existing BMP. There is no offsite area which drains across the site. A sand filtration basin is proposed to treat pollutants from the proposed improvements.

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: DAVID SEAGRAVES Telephone: 210-309-1017

Date: 1-17-2020 Fax: —

Representing: #3917 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

David Seagraves

STATE OF TEXAS
DAVID P. SEAGRAVES
GEOLOGY
3917
LICENSED
PROFESSIONAL GEOSCIENTIST

Regulated Entity Name: _____

Project Information

1. Date(s) Geologic Assessment was performed: 12-27-2019 & 1-8-2020
2. Type of Project:
   - ☑ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☑ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

12. ☑ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☐ Geologic or manmade features were not discovered on the project site during the field investigation.

13. ☐ The Recharge Zone boundary is shown and labeled, if appropriate.

14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

    ☑ There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

15. ☐ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

4. ☑ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

5. ☑ Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
* CRAWFORD BEXAR	D	* 1.0

** Soil Group Definitions (Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

*(Cb) Crawford and Bexar stony soils (0 to 5 percent slopes) / AVERAGE THICKNESS OVERALL THICKNESS 1-2" TO 24"

6. ☑ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☑ **Attachment C – Site Geology**. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☑ **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

   Applicant's Site Plan Scale: 1" = _____'
   Site Geologic Map Scale: 1" = _____'
   Site Soils Map Scale (if more than 1 soil type): 1" = _____'

9. Method of collecting positional data:

   ☐ Global Positioning System (GPS) technology.
   ☐ Other method(s). Please describe method of data collection: _____

10. ☑ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.

11. ☑ Surface geologic units are shown and labeled on the Site Geologic Map.

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: AGUDAS ACHIM (~8.34 ACRES) NORTH BEXAR CO.

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1			SF	20	KEP	5	250						N	20	40		✓		✓	STREAM
S-2			CD	5	KDR	40		3.5					X	5	10	✓			✓	HILLSIDE
S-3			CD	5	KDR	56	30	5					F-X	5	10	✓			✓	HILLSIDE
S-4			CD	5	KDR	24		3					X	5	10	✓		✓		HILLSIDE
S-5			CD	5	KDR	38	16	3					F-X	5	10	✓		✓		HILLSIDE
S-6			CD	5	KDR	40	60	2.5					F	10	15	✓		✓		HILLSIDE

* DATUM:

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

David Seagraves, PG 3917

Date 1-16-2020

Sheet 1 of 1

STATE OF TEXAS
DAVID P. SEAGRAVES
GEOLOGY
3917
LICENSED PROFESSIONAL GEOSCIENTIST

TCEQ-0585-Table (Rev. 10-01-04)

Congregation Agudas Achim (Approx. 8.344 Acres)
Agudas Achim Subdivision - Unit 2
Lot 3 - Block 1 - N.C.B. 18197
San Antonio, Texas
North Bexar County

SOIL UNIT:

The on-site soil consists of upwards to 24 inches of a dark grayish to very dark grayish brown silty clay to clay with gravel size (chert and limestone) fragments.

The soil type is the Crawford and Bexar stony soils (Cb) (0 to 5 percent slopes) as referenced by the S.C.S. Soil Survey of Bexar County, Texas (1966) and field investigation.

This soil type is in Soil Group "D" as referenced by the S.C.S. Hydrologic Soil Groups - Technical Release No. 55, Appendix A, and is defined as soils having a very slow infiltration" rate when thoroughly wetted.

This soil cover is very thin at the higher elevations of the site (1-2 inches) and thickens to approximately two feet thick going downslope and along the lower elevations. The soil contains a greater amount of chert fragments and limestone fragments at the lower elevations, as well as, clay infilling of the fractured and detached limestone float rock.

The site has been developed for approximately 25 years and contains a very good grass cover with a moderate to dense tree cover.

Overall slope is approximately 1 to 5 percent.

Overall, it appears that the soil unit has the capacity to impede fluid movement into the subsurface.

Congregation Agudas Achim (Approx. 8.344 Acres)
Agudas Achim Subdivision - Unit 2
Lot 3 - Block 1 - N.C.B. 18197
San Antonio, Texas
North Bexar County

SITE-SPECIFIC STRATIGRAPHIC COLUMN:

DEL RIO FORMATION (Kdr) (Upper Cretaceous)	5-6 Feet Thick	Olive brown calcareous clay-claystone to mudstone which forms highly expansive soil. Contains a very thin soil cover and occupies the higher elevations of the site. (989' to 995'). Contact with the underlying Person Fm. is inferred due to soil cover at the site.
PERSON FORMATION (Kep) EDWARDS GROUP (Lower Cretaceous)	9-10 Feet Thick	Pale gray dolomitic limestone underlying the Del Rio Fm. Overall regional thickness is approximately 130 to 150 feet thick. The Person Fm. contains a slight exposure at the site within the streambed, otherwise it is soil covered. Where exposed it is virtually featureless. The Person FM occupies the mid to lower elevations of the site

Congregation Agudas Achim (Approx. 8.344 Acres)
Agudas Achim Subdivision - Unit 2
Lot 3 - Block 1 - N.C.B. 18197
San Antonio, Texas
North Bexar County

SITE-SPECIFIC GEOLOGY:

The on-site geological units consist of the Del Rio Formation and the Person Formation as referenced by the Geologic Map of the New Braunfels, Texas 30X60 Minute Quadrangle - 2000 (Bureau of Economic Geology) and field observations.

The site is located near the intersection of Huebner Road and Bitters Road, and is approximately 3,500 feet updip from the Edwards Recharge Zone southern boundary.

This site has been developed (~ 25 years ago) and consist of large structure(s), driveway and parking spaces.

This Modified WPAP is for a proposed new structure to be built on the site. The existing geologic/man-made features are upslope from the proposed location of the structure.

The Del Rio Formation (Kdr) is situated along the southern portion and higher elevations of the site.

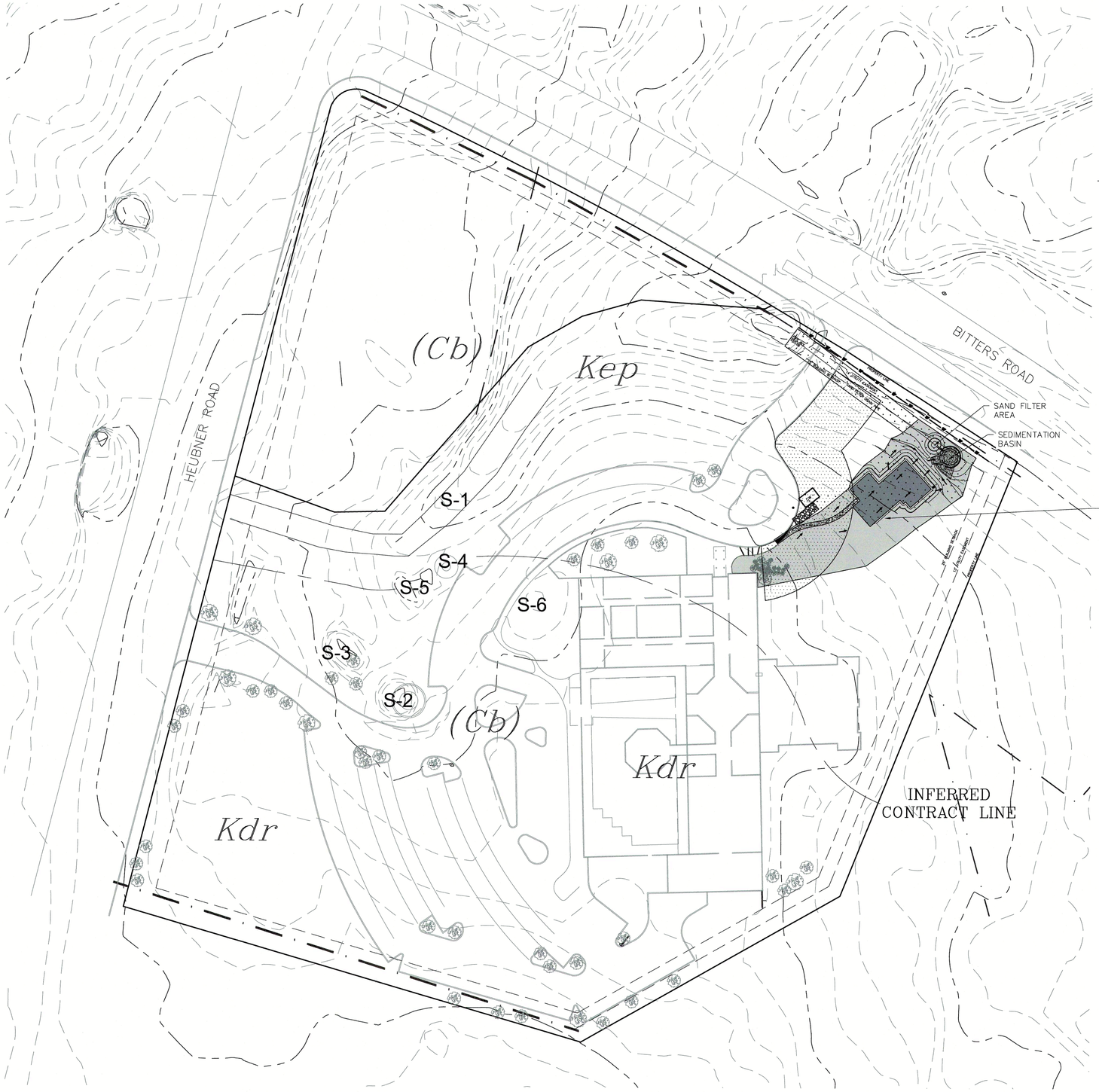
The Person Formation (Kep) is predominately soil covered but is exposed within the scoured channel of the drainage way. Feature S-1, solution enlarged fractures were noted within the channel (250' x 5') Most are hairline or slightly larger fractures with a covering of coarse material , they are not continuous, some areas within the channel are a featureless, indurated top of bedded limestone. Some slightly fractured features are clay filled.

Features S-2 through S-5 are the result of development and represent an existing Sedimentation-Filtration Basin. Feature S-2 is concrete lined and the approximate size is ~40' diameter by 3.5' in depth. Feature S-2 has piping that flows into Feature S-3, which contains a plastic liner and is approximately 56' in length by 30' wide by up to 5' in depth.

Features S-4 and S-5 are a similar set up, but slightly smaller. Feature S-4 is concrete lined and is approximately 24' in diameter by 3' in depth. Piping from S-4 flows into Feature S-5, which is plastic lined and dimensions are 16' by 38' by ~3' in depth.

Feature S-6 appears to be a non-karst closed depression due to development. Dimensions for S-6 are approximately 40' by 60' by 2.5'. This feature is bounded on three sides which consists of a building structure foundation, roadway curb and a fence foundation.

Overall, based on surface analysis, the proposed location for the new structure appears to be on a "typical" setting for this portion of the Edwards Recharge Zone.



SCALE: 1"=50'

LEGEND

S-1	MAN-MADE FEATURE
U / D	UPTHROWN / DOWNTHROWN
	LITHOLOGIC CONTACT (dashed where inferred)
	EXISTING CONTOURS
	DRAINAGE FLOW ARROW
	50' ENVELOPE FROM SS LINE (AREA OF DISTURBANCE)
SF	SILT FENCE
	CONSTRUCTION EXIT
CW	CONCRETE WASHOUT AREA

NOTES:

1. AFTER ALL SANITARY SEWER CONSTRUCTION HAS BEEN COMPLETED, FINAL STABILIZATION OF THE CONSTRUCTION AREA ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES SHALL BE COMPLETED BY EVENLY DISTRIBUTING SEEDING AND WATERING TO A MINIMUM OF 70% OF THE NATIVE BACKGROUND VEGETATIVE COVER.

2. ALL WASTEWATER MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AUGUST 2, 2011 SAWS SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION.

3. ALL WASTEWATER PRECAST MANHOLES SHALL BE SUPPLIED BY CHARLOTTE'S CONCRETE, MOORTEX OR CALVERT.

4. STABILIZATION PRACTICES MUST BE INITIATED AS SOON AS PRACTICABLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.

5. ALL FEATURES ENCOUNTERED IN THE GEOLOGIC ASSESSMENTS COMPLETED BY DAVID SEAGRAVES, GEOLOGIST (JAN. 2019) AND INTEGRATED TESTING AND ENGINEERING COMPANY (JAN. 2019) ON THE PROJECT SITE HAVE BEEN CLASSIFIED AS "NOT SENSITIVE" OR "POSSIBLY SENSITIVE" BY ALL GEOLOGISTS DURING THEIR GEOLOGIC ASSESSMENTS. FEATURES S-50 AND S-51 WERE CLASSIFIED AS "NOT SENSITIVE" AND WERE FILLED DURING THE CONSTRUCTION OF UNITS 1 & 2 ACCORDING TO THE APPROVED WPAP.

SITE GEOLOGIC MAP : (LEGEND)

SITE GEOLOGICAL UNIT :	*Kdr*	–	*DEL RIO FORMATION*
	Kep	–	*PERSON FORMATION*
SITE SOIL UNIT :	*(Cb)*	–	*LEWISVILLE SILTY CLAY 0 TO 1 PERCENT SLOPES.*

FEATURES:

S-1 SF SOLUTION ENLARGED FRACTURES
S-2 CD (NON-KARST CLOSED DEPRESSION)
S-3 CD (NON-KARST CLOSED DEPRESSION)
S-4 CD (NON-KARST CLOSED DEPRESSION)
S-5 CD (NON-KARST CLOSED DEPRESSION)
S-6 CD (NON-KARST CLOSED DEPRESSION)

STATE OF TEXAS · DAVID P. SEAGRAVES · GEOLOGY 3917 · LICENSED PROFESSIONAL GEOSCIENTIST

DAVID SEAGRAVES, GEOLOGIST *1/31/2020*

ORIGINAL WPAP PERMIT # 13-97020601

REVISIONS					
					DATE
					DESC.
1	2	3	4	Δ	

FOR: AGUDAS ACHIM CONGREGATION

WPAP MODIFICATION
GEOLOGIC SITE PLAN
AGUDAS ACHIM WPAP MODIFICATION

SAN ANTONIO, TEXAS

DATE: NOV 2019

©2019

Vertical Scale 1"=N/A
Horizontal Scale 1"=
0

SHEET 1 OF 1

PROJ NO.

Jan 31, 2020 – 3:33pm
R:\1422-01\Engineering\WPAP\GEOLOGIC SITE.dwg

DRAWN BY: DHS CHECKED BY: PAS APPROVED BY: PAS

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This request for a **Modification of a Previously Approved Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: Paul A. Schroeder, P.E., R.P.L.S.

Date: 02/11/2020

Signature of Customer/Agent:

Project Information

1. Current Regulated Entity Name: Agudas Achim Subdivision Unit 2
   Original Regulated Entity Name: Agudas Achim Subdivision Unit 2
   Regulated Entity Number(s) (RN): 102749561
   Edwards Aquifer Protection Program ID Number(s): _____
   ☒ The applicant has not changed and the Customer Number (CN) is: 603673385
   ☐ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. ☒ **Attachment A: Original Approval Letter and Approved Modification Letters.** A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):
   - ☐ Physical or operational modification of any water pollution abatement structure(s) including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
   - ☐ Change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
   - ☒ Development of land previously identified as undeveloped in the original water pollution abatement plan;
   - ☐ Physical modification of the approved organized sewage collection system;
   - ☐ Physical modification of the approved underground storage tank system;
   - ☐ Physical modification of the approved aboveground storage tank system.

4. ☒ Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

WPAP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	8.3	8.3
Type of Development	Religious Facility	Classroom
Number of Residential Lots	0	0
Impervious Cover (acres)	_____	0.06
Impervious Cover (%	_____	32%
Permanent BMPs	Sand Filters	Sand Filters
Other	_____	_____

SCS Modification Summary	***Approved Project***	***Proposed Modification***
Linear Feet	N/A	N/A
Pipe Diameter	_____	_____
Other	_____	_____

AST Modification Summary	***Approved Project***	***Proposed Modification***
Number of ASTs	N/A	N/A
Volume of ASTs	_____	_____
Other	_____	_____

UST Modification Summary	***Approved Project***	***Proposed Modification***
Number of USTs	N/A	N/A
Volume of USTs	_____	_____
Other	_____	_____

5. ☒ **Attachment B: Narrative of Proposed Modification**. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved, including any previous modifications, and how this proposed modification will change the approved plan.

6. ☒ **Attachment C: Current Site Plan of the Approved Project**. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
   - ☐ The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
   - ☒ The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.

7. ☐ The acreage of the approved plan has increased. A Geologic Assessment has been provided for the new acreage.
   ☒ Acreage has not been added to or removed from the approved plan.

8. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

ATTACHMENT A

ORIGINAL APPROVAL LETTER

EXHIBIT
"B"

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

June 30, 1995

Mr. Marc Schnall
Congregation Agudas Achim
1201 Donaldson
San Antonio, Texas 78228

Re: **Edwards Aquifer**, Bexar County
PROJECT: Agudas Achim Subdivision, Unit 2, Located at SE corner of Bitters & Huebner Rds, San Antonio, Texas.
TYPE: Request for Approval of Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) §313.4; Edwards Aquifer Protection Program.

Dear Mr. Schnall:

The Texas Natural Resource Conservation Commission (TNRCC) has completed their review of the WPAP application for the referenced project that was submitted by Vickrey & Associates on behalf of Congregation Agudas Achim to the San Antonio Regional Office on March 16, 1995. Final review of the WPAP submittal was completed after additional material was received on April 12, 1995, May 9, 1995, and May 26, 1995.

PROJECT DESCRIPTION

The proposed 8.3 acre project will consist of a synagogue with associated parking, driveways, and related structures needed for the congregation. The site is located within the City of San Antonio, and will conform with applicable codes and requirements of the City of San Antonio. Potable water will be supplied by San Antonio Water System.

The normal population of the development is estimated to be 3,450 persons. 22,410 gallons per day of domestic wastewater is to be generated by this project. It will be disposed of by conveyance to the existing Dos Rios Wastewater Treatment Plant owned by the San Antonio Water System.

The proposed impervious cover for the development, approximately 3.62 acres (44%), includes roof tops, driveways, parking lots, and sidewalks. Stormwater runoff will be typical of a commercial site.

GEOLOGY ON SITE

According to the geologic assessment included with the submittal,

two (2) potential recharge features were reported to be on the subject site. One (1) feature was assessed as being of no significance as a recharge feature. One (1) feature was assessed as being of low significance as a recharge feature.

The Region 13 site inspection of April 25, 1995, revealed no additional recharge features.

GEOLOGY DOWN-GRADIENT OF SITE

According to the geologic assessment included with the submittal, twelve (12) potential recharge features were reported downgradient of the subject site. All twelve (12) features were assessed as being of low significance as recharge features.

POLLUTION ABATEMENT

I. During Construction:

The following measures will be taken to prevent pollution of stormwater originating on-site or up-gradient from the project site and potentially flowing across and off the site during construction:

A. Stabilized construction entrances shall be installed at all sites of ingress and egress prior to initiation of any other regulated activity.

B. Temporary erosion and sedimentation controls (silt fences and rock berms) shall be installed prior to initiation of any other regulated activity.

C. The water quality pond shall be excavated and used as a sedimentation basin.

II. After Construction:

The following measures will be taken to prevent pollution of stormwater originating on-site or up-gradient from the project site and potentially flowing across and off the site after construction:

A. Sedimentation/filtration basins will be constructed to filter the first ½ inch of stormwater runoff from 2.253 acres of the site.

B. Vegetative filter strips will be maintained to treat the first ½ inch of stormwater runoff from 0.601 acres of the site.

III. Recharge Features:

The following measures will be taken to prevent pollutants from entering recharge features while maintaining or enhancing the quantity of water entering the recharge features identified in the geologic assessment.

A. Sedimentation/filtration basins will be constructed to filter the first ½ inch of stormwater runoff.

B. Vegetative filter strips will be maintained to treat the first ½ inch of stormwater runoff.

APPROVAL

The plan for this project has been reviewed for compliance with 30 TAC §313.4 which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed water pollution abatement plan is in general agreement with 30 TAC §313.4; therefore, approval of the plan is hereby granted subject to the specific conditions listed below.

Failure to comply with any of the following conditions, the deed recordation requirement, or any other specific conditions of approval is a violation of these rules. Pursuant to §26.136 of the Texas Water Code, any violations of the Edwards Aquifer Rules may result in administrative **penalties of up to $10,000 for each act of violation and for each day of violation.**

SPECIAL CONDITIONS

1. All open or soil filled boreholes located on-site or down-gradient of the site shall be plugged with cement slurry, from the bottom of the hole to the top of the hole, so as to not allow water or contaminants to enter the subsurface environment.

2. The sedimentation/filtration basins are designed in accordance with the TNRCC Edwards Aquifer Guidance Manual. The basins will incorporate sedimentation and filtration. The filtration system will consist of appropriately sized sedimentation chambers and a filtration basin with a minimum of 18 inches of sand filter media, sized as shown on the design plans in the WPAP.

3. A formal maintenance plan and schedule for the sedimentation and filtration basin shall be submitted to the San Antonio Edwards Aquifer Coordinator for review and possible modification prior to completion of construction. The plan

shall include a responsible party and the anticipated cleaning schedule. Upon approval by the Texas Natural Resource Conservation Commission the plan shall be implemented in accordance with the approved schedule.

STANDARD CONDITIONS OF APPROVAL

1. Please be reminded that 30 TAC §313.4(c) requires the owner/developer to: (1) record in the county deed records that this property is subject to the approved WPAP; and (2) submit to the Executive Director through the San Antonio Regional Office, within 30 days of receiving this written notice of approval of the water pollution abatement plan and prior to commencing construction, proof of application for recordation of notice in the county deed records. Enclosed is a suggested format you may use to deed record your approved WPAP.

2. Prior to commencing construction, the applicant/agent shall submit to the San Antonio Regional Office copies of any changes made to the plans and specifications for this project which have been required by the TNRCC review and/or all other permitting authorities.

3. **Please note, following this approval of the regulated activities described in the referenced WPAP submittal, any amendment to these activities required by some other regulating authority or desired by the applicant will require the submittal of a WPAP application to amend this approval. And, as indicated in 30 TAC §313.4 and 30 TAC §313.27, an application to amend any approved regulated activity shall include payment of appropriate fees and all information necessary for its review and Executive Director approval.**

4. Additionally, all contractors conducting regulated activities associated with this proposed regulated project shall be provided with copies of this approval letter and the entire contents of the submitted WPAP so as to convey to the contractors the specific conditions of this approval. During the course of these regulated activities, the contractors shall be required to keep on-site copies of the WPAP and this approval letter.

5. The temporary erosion and sedimentation (E&S) controls for the entire project shall be installed prior to beginning any other construction work on this project.

6. The appropriate E&S control(s) that shall be used during the construction of the project should be determined as follows: (1) **Silt fences** should be used when the drainage area is less

than 2 acres and the slope is less than 10%. (2) **Rock berms with filtration** should be used when the drainage areas are greater than two acres or when the slopes are in excess of 10%. The bottom edge of the filter fabric must be buried a minimum of 6 inches below grade.

7. The TNRCC may monitor stormwater discharges from the site to evaluate the adequacy of the temporary erosion and sedimentation control measures. Additional protection may be necessary if excessive solids are being discharged from the site.

8. Also, 30 TAC §313.4(d)(2) requires that if any significant recharge features, such as solution openings or sinkholes, are discovered during construction, all regulated activities near the significant recharge feature must be suspended immediately and may not be resumed until the Executive Director has reviewed and approved the methods proposed to protect the aquifer from any potential adverse impacts. Upon discovery of the significant recharge features, the developer shall immediately notify the San Antonio Regional Office.

9. Upon completion of the project, the applicant shall reseed or sod all areas disturbed during construction.

10. If any abandoned wells exist on the site or are found during construction of the proposed development, they shall be plugged in accordance with the local underground water conservation district's plugging procedures, if applicable, or 30 TAC §287.50(a) of this title (relating to Standards for Plugging Wells that Penetrate Undesirable Water Zones), or an equivalent method, as approved by the Executive Director. Pursuant to 30 TAC §287.48(e), the person that plugs such a well shall, within 30 days after plugging is complete, submit a Water Well Completion and Plugging Report to the Executive Director, through the San Antonio Regional Office and to the Edwards Underground Water District.

    Any drill holes resulting from core sampling on-site or down-gradient of the site shall be plugged with cement slurry, from the bottom of the hole to the top of the hole, so as to not allow water or contaminants to enter the subsurface environment.

11. No waste-disposal wells, new confined animal feeding operations, land disposal of Class I wastes, or use of sewage holding tanks as parts of organized collection systems shall be allowed on the recharge zone of this regulated development.

12. During the course of the construction related to the referenced regulated project, the owner/developer shall comply with all applicable provisions of 30 TAC §313.4. Construction which is initiated and abandoned, or not completed, shall be returned to a permanent condition such that groundwater in the Edwards Aquifer is protected from potential contamination. Additionally, the applicant, Congregation Agudas Achim, shall remain responsible for the provisions and special conditions of this approval until such responsibility is legally transferred to another person or entity, upon which that person or entity shall assume responsibility for all provisions and specific conditions of this approval.

13. **Pursuant to 30 TAC §313.4(d)(1) and prior to commencing regulated activities, the applicant must provide the San Antonio Regional Office with the date on which the regulated activity will commence.**

14. Please note that 30 TAC §313.4(g) states that this approval expires two years from this date unless, prior to the expiration date, construction has commenced on the regulated project.

15. Approval of the design of the sewage collection system for this proposed subdivision shall be obtained from the Texas Natural Resources Conservation Commission prior to the commencement of construction of any sewage collection system, the design of which shall be in accordance with 30 TAC §313.5 and 30 TAC §317.

16. The developer shall ensure that construction debris, such as but not limited to scrap wood, bricks, paint, adhesives, containers, paper, etc. is disposed of properly at an authorized landfill off of the Edwards Aquifer Recharge Zone.

17. If asphaltic materials such as "seal coat", emulsion or other asphaltic products used for paving, roofing, etc. wash off or leave the project site the developer shall notify the Texas Natural Resource Conservation Commission immediately and commence clean-up.

18. Each purchaser of a single-family residential lot shall be informed in writing that this subdivision is located on the Edwards Aquifer Recharge Zone.

19. Each purchaser of a single-family residential lot shall be informed in writing about best management practices of pesticide and fertilizer application. The applicant may use Preventing Groundwater Pollution, A Practical Guide to Pest

Control, available from the Edwards Underground Water District (210/222-2204), or equivalent information produced by recognized authorities such as the Soil Conservation Service, Texas Dept. of Agriculture, U.S. Dept. of Agriculture, etc. The applicant may develop their own educational information (with review by the TNRCC prior to use).

20. It is recommended that signage be permanently posted and maintained in good condition at each external entrance to and exit from the subdivision which reminds home owners and visitors they are on the Recharge Zone of the Edwards Aquifer.

If you have any questions, please contact Julie Rogers at the San Antonio Regional Office (210) 490-3096.

Sincerely,

J. Richard Garcia,
Regional Manager, for

Dan Pearson,
Executive Director

JRG/JPR-jpr

Enclosure

cc: Keith Pyron, P.E., Vickrey & Associates
Rebecca Cedillo, San Antonio Water System
Arnulfo Gonzalez, San Antonio Water System
Ray Rendon, P.E., Environmental Engineer, Bexar County
Rick Illgner, Edwards Underground Water District
TNRCC - San Antonio Regional Office - Program Files
TNRCC - Central Records (with attachment)

ATTACHMENT B

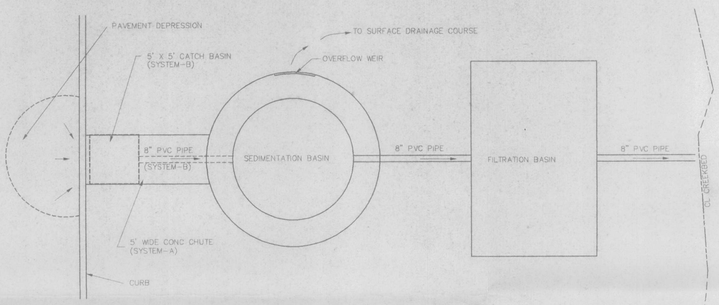
NARRATIVE OF PROPOSED MODIFICATION

ATTACHMENT B
NARRATIVE OF PROPOSED MODIFICATION

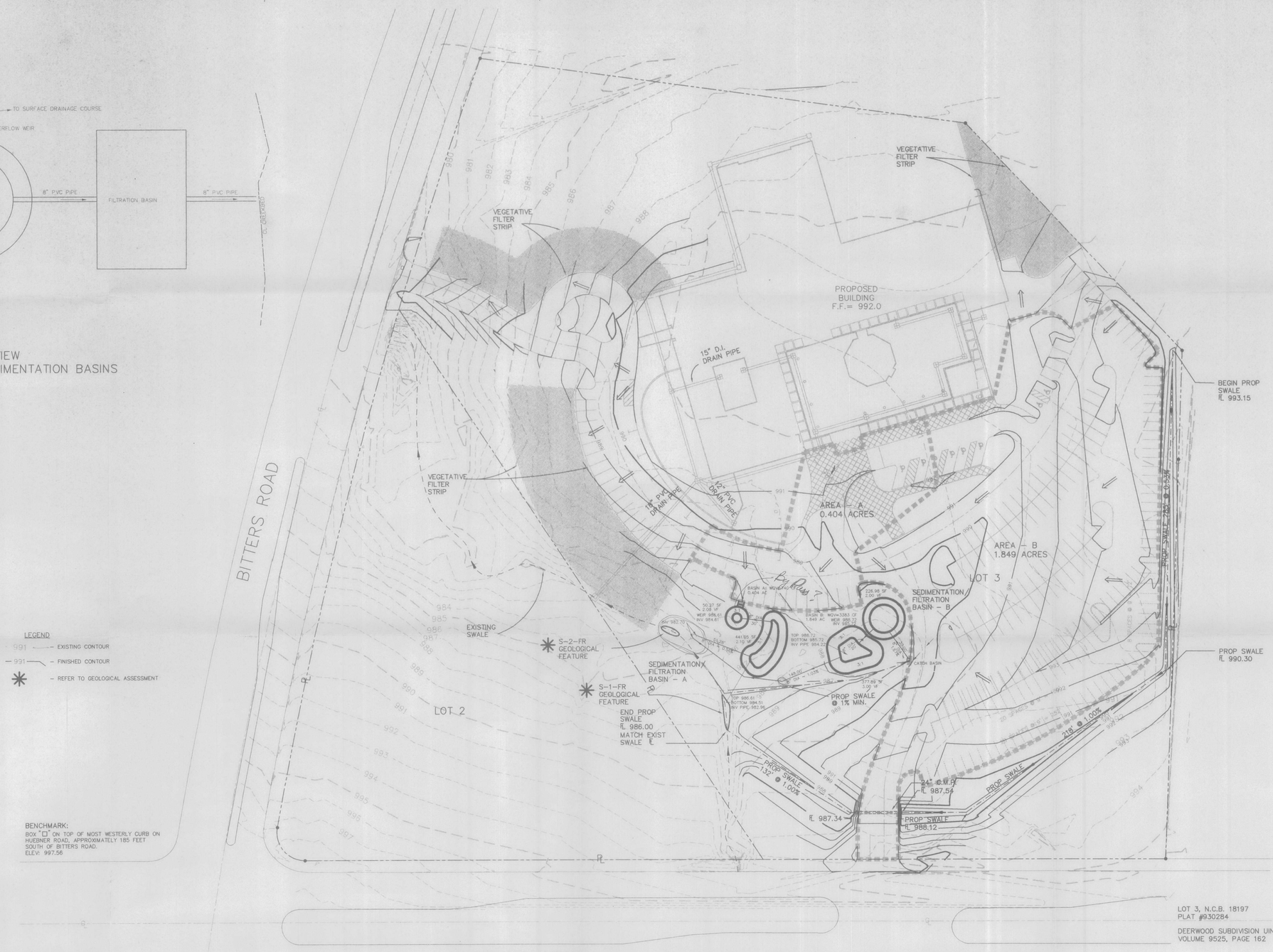
The project is a modification of an existing WPAP for Congregation Agudas Achim at 16550 Huebner Road, in north San Antonio, Texas. The existing facilities are a worship facility, related parking, and support structures. These facilities are treated by a sand filter basin and vegetative filter strips. The modification is for the addition of a youth center/classroom building of approximately 2200 square feet and 414 square feet of additional impressive cover. The additional cover consists of sidewalk and a filtration basin. The improvements are proposed on 0.32 acres of land which is included in the original WPAP (8.3 acres) as undeveloped. A portion of the 0.32-acre drainage area is currently shown as native vegetative filter strip. With the exception of a 20' wide by 60' long strip that will be disturbed during construction and will contain a proposed sidewalk, the existing vegetative filter strip will remain as it exists. The project area is currently draining away from other existing facilities and does not drain toward an existing BMP. There is no offsite area which drains across the site. A sand filtration basin is proposed to treat pollutants from the proposed improvements.

ATTACHMENT C

SITE PLAN



PLAN VIEW
FILTRATION / SEDIMENTATION BASINS
N.T.S.



LEGEND

991 — EXISTING CONTOUR

991 — FINISHED CONTOUR

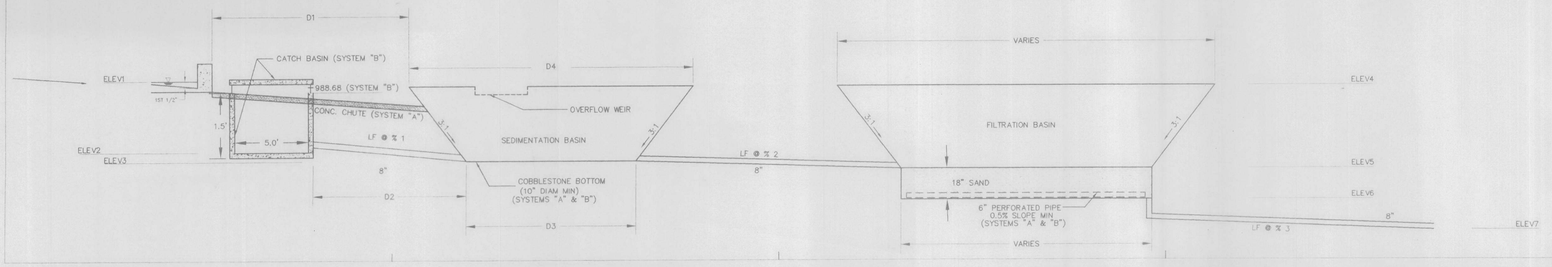
✱ — REFER TO GEOLOGICAL ASSESSMENT

BENCHMARK:
BOX "□" ON TOP OF MOST WESTERLY CURB ON HUEBNER ROAD, APPROXIMATELY 185 FEET SOUTH OF BITTERS ROAD.
ELEV: 997.56

PROFILE VIEW
NTS

PROFILE VALUE TABLE

BASIN SYSTEMS	ELEV1	ELEV2	ELEV3	ELEV4	ELEV5	ELEV6	ELEV7	D1	D2	D3	D4	LF @ % 1	LF @ % 2	LF @ % 3	VOLUME OF SEDIMENTATION BASIN	VOLUME OF FILTRATION BASIN	DRAINAGE AREA	WATER QUALITY VOLUME
A	986.65	N/A	984.61	986.65	984.46	982.96	982.70	5 FEET	N/A	8 FEET	20 FEET	N/A	20 LF @ 0.5%	51.28 LF @ 1.45%	364.43 CUBIC FEET	1761.9 CUBIC FEET	.404 ACRES	740 CUBIC FEET
B	988.72	987.18	986.68	988.72	985.72	984.22	982.70	35 FEET	30	25 FEET	37 FEET	30 LF @ 1.67%	30 LF @ 1.5%	148 LF @ 1.52%	1566.08 CUBIC FEET	2569.50 CUBIC FEET	1.849 ACRES	3383 CUBIC FEET



NORTH
0 5 10 25 50 100 FT

Congregation Agudas Achim
San Antonio, Texas

Finegold Alexander + Associates Inc
Architects and Preservation Planners
BOSTON, MA

Charles Chaloff Consulting Engineers, Inc.
Structural Engineers
BOSTON, MA

Goetting and Associates, Inc.
Mechanical/Electrical/Plumbing Engineers
SAN ANTONIO, TX

Ford Powell and Carson, Inc.
Landscape Architects
SAN ANTONIO, TX

Vickrey and Associates, Inc.
Civil Engineers
SAN ANTONIO, TX

DRAWING TITLE

PERMANENT WATER POLLUTION ABATEMENT PLAN

REVISIONS

SCALE
1" = 40'

DATE
MARCH, 1995

DRAWN BY: MVH
CHECKED BY: FGH

PROJECT NUMBER
5680Ø

DRAWING NUMBER

C5

№0488 01

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

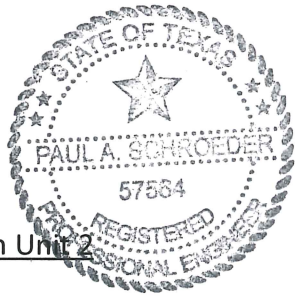
Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Water Pollution Abatement Plan Application Form** is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Print Name of Customer/Agent: Paul A. Schroeder, PE, RPLS

Date: 12/5/19

Signature of Customer/Agent:



Regulated Entity Name: Agudas Achim Subdivision Unit 2

Regulated Entity Information

1. The type of project is:

   ☐ Residential: Number of Lots:_____
   ☐ Residential: Number of Living Unit Equivalents:_____
   ☐ Commercial
   ☐ Industrial
   ☒ Other:SYNAGOGUE

2. Total site acreage (size of property): .32 acres (modification area)

3. Estimated projected population:0

4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	2200	÷ 43,560 =	0.05
Parking	—	÷ 43,560 =	—
Other paved surfaces	414	÷ 43,560 =	0.01
Total Impervious Cover	2614	÷ 43,560 =	0.06

Total Impervious Cover 0.06 **÷ Total Acreage** 0.32 **X 100 =** 19**% Impervious Cover**

5. ☒ **Attachment A - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.

6. ☒ Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

Complete questions 7 - 12 if this application is exclusively for a road project.

7. Type of project:

   ☐ TXDOT road project.
   ☐ County road or roads built to county specifications.
   ☐ City thoroughfare or roads to be dedicated to a municipality.
   ☐ Street or road providing access to private driveways.

8. Type of pavement or road surface to be used:

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

9. Length of Right of Way (R.O.W.): _____ feet.

   Width of R.O.W.: _____ feet.
   L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

10. Length of pavement area: _____ feet.

    Width of pavement area: _____ feet.
    L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
    Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover.

11. ☐ A rest stop will be included in this project.

    ☐ A rest stop will not be included in this project.

12. ☐ Maintenance and repair of existing roadways that do not require approval from the TCEQ Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TCEQ.

Stormwater to be generated by the Proposed Project

13. ☒ **Attachment B - Volume and Character of Stormwater**. A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on the area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

Wastewater to be generated by the Proposed Project

14. The character and volume of wastewater is shown below:

100% Domestic	6,000 Gallons/day
_____% Industrial	_____Gallons/day
_____% Commingled	_____Gallons/day
TOTAL gallons/day _____	

15. Wastewater will be disposed of by:

☐ On-Site Sewage Facility (OSSF/Septic Tank):

- ☐ **Attachment C - Suitability Letter from Authorized Agent**. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.
- ☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☒ Sewage Collection System (Sewer Lines):

- ☒ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.
- ☐ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

- ☐ The SCS was previously submitted on_____.
- ☐ The SCS was submitted with this application.
- ☐ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

☒ The sewage collection system will convey the wastewater to the Steven M. Clouse Water Recycling Center (name) Treatment Plant. The treatment facility is:

☒ Existing.
☐ Proposed.

16. ☒ All private service laterals will be inspected as required in 30 TAC §213.5.

Site Plan Requirements

Items 17 – 28 must be included on the Site Plan.

17. ☒ The Site Plan must have a minimum scale of 1" = 400'.

Site Plan Scale: 1" = 50'.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FIRM No. 4B029C0235G, effective date September 29, 2010

19. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.

☐ The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan.

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):

☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

☒ There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:

☒ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☐ No sensitive geologic or manmade features were identified in the Geologic Assessment.
☐ **Attachment D - Exception to the Required Geologic Assessment**. A request and justification for an exception to a portion of the Geologic Assessment is attached.

22. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

23. ☒ Areas of soil disturbance and areas which will not be disturbed.

24. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

25. ☒ Locations where soil stabilization practices are expected to occur.

26. ☐ Surface waters (including wetlands).

    ☒ N/A

27. ☐ Locations where stormwater discharges to surface water or sensitive features are to occur.

    ☒ There will be no discharges to surface water or sensitive features.

28. ☒ Legal boundaries of the site are shown.

Administrative Information

29. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

ATTACHMENT A – FACTORS AFFECTING WATER QUALITY

The quality of the surface water from this project should be minimally affected by this development due to the small nature of a project. During construction of this project disturbed areas could contribute silt and other earthen particles to the surface runoff. These should be minimized by the measures outlined in the SWPPP. After construction is completed smaller amounts of similar material should be mitigated by sheet flow, natural vegetation and the filtration basin. Minor amounts of household pesticides, herbicides and fertilizers should be treated similarly.

ATTACHMENT B – VOLUME AND CHARACTER OF STORMWATER.

Existing Conditions

Surface runoff may contain modest concentrations of organic waste (wild animals, cattle, goats, etc.) and particles from erosion typical for this terrain.

Proposed Conditions

After construction activities are completed and disturbed areas are stabilized, concentrations of suspended solids in the stormwater runoff are expected to be approximately at pre-developed levels. Runoff may contain modest concentrations of organic waste (pets), small amounts of fertilizers, pesticides and herbicides (lawn and shrub care).

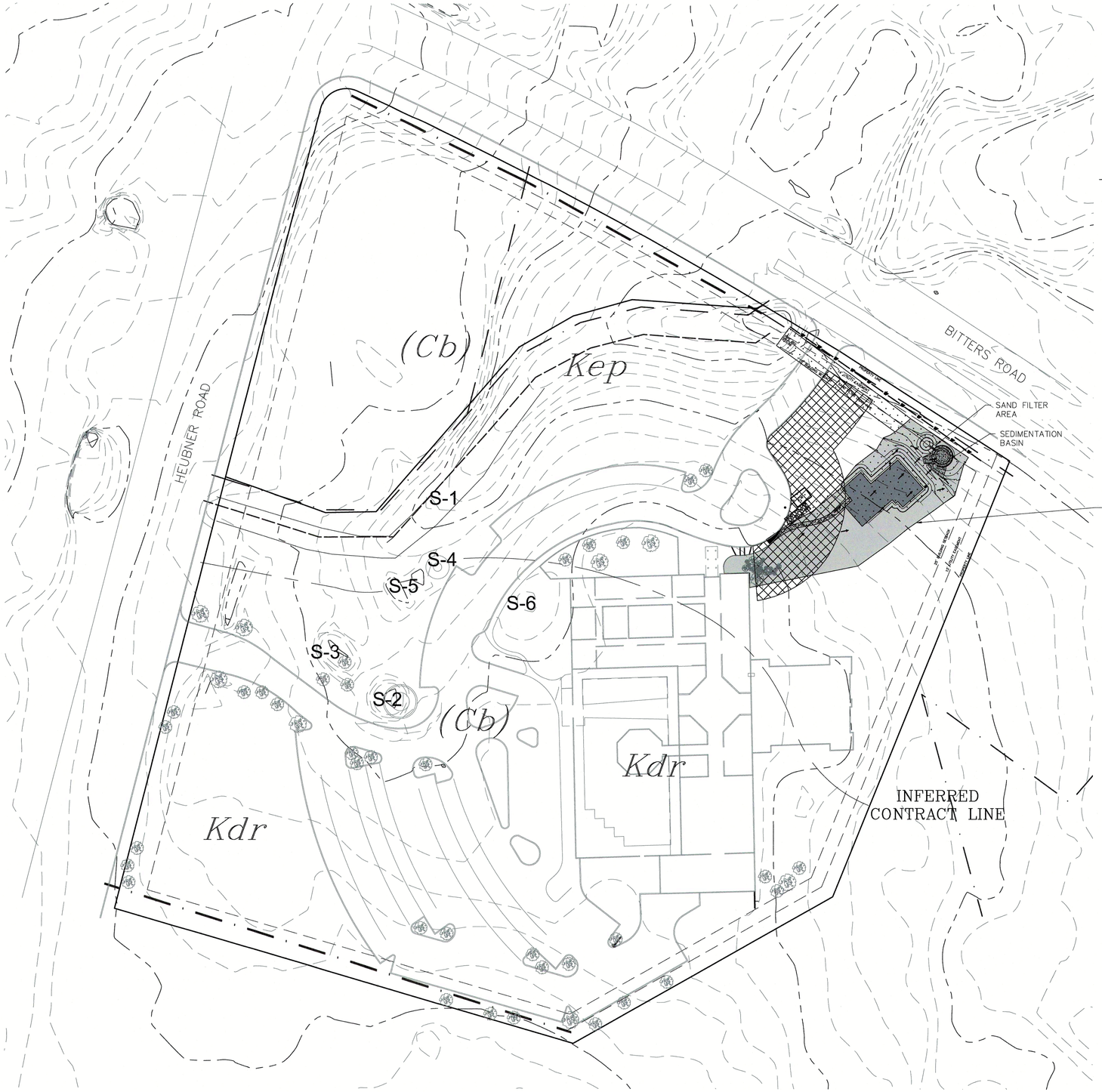
ATTACHMENT C

N/A

ATTACHMENT D

An exception to the requirement of a Geologic Assessment (GA) is hereby requested. A GA was provided with the original WPAP. The GA indicated there are no features in the area of the proposed modification. See attached GA plan.

Therefore it is hereby requested that an exemption to the GA requirement be granted.



SCALE: 1"=50'

LEGEND

- SF — SILT FENCE
- 820 — EXISTING CONTOURS
- 820 — PROPOSED CONTOURS
- FLOW ARROW
- CONSTRUCTION EXIT
- CW — CONCRETE WASHOUT AREA

NO PORTION OF THE SITE IS WITHIN THE 100 YR. FLOOD PLAIN BASED ON FIRM NO. 48091C-0335F DATED SEPTEMBER 29, 2010.

THERE ARE NO SURFACE WATERS.

- TSS CALCULATIVE AREA (0.32 AC.)
- AREA OF DISTURBANCE (0.24 AC.)
- EXISTING GRASS FILTER STRIP

ORIGINAL CZP PERMIT # 13-97020601

REVISIONS

Δ	DESC.	DATE
1		
2		
3		
4		

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL • ENVIROMENTAL • SURVEY
12940 Country Parkway San Antonio, TX 78216
Telephone: (210) 349-3271
Firm Registration No: F-159
TBPLS Firm Registration No: 10004100

FOR: AGUDAS ACHIM CONGREGATION

WPAP MODIFICATION SITE PLAN

AGUDAS ACHIM WPAP MODIFICATION

SAN ANTONIO, TEXAS

DATE: NOV 2019

Vertical Scale 1"=N/A
Horizontal Scale 1"=
0

SHEET 1 OF 5

PROJ NO.

STATE OF TEXAS
PAUL A. SCHROEDER
87564
REGISTERED PROFESSIONAL ENGINEER
1-31-20

Feb 03, 2020 - 9:29am
R:\1422-014\Engineering\DWG\WPAP SITE.dwg

DRAWN BY: DHS CHECKED BY: PAS APPROVED BY: PAS

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Temporary Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Paul A. Schroeder, PE, RPLS

Date: 12/5/19

Signature of Customer/Agent:

Regulated Entity Name: Agudas Achim Subdivision Unit 2

Project Information

Potential Sources of Contamination

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1. Fuels for construction equipment and hazardous substances which will be used during construction:

   ☐ The following fuels and/or hazardous substances will be stored on the site: _____

   These fuels and/or hazardous substances will be stored in:

   ☐ Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

☒ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions**. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

3. ☐ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. ☒ **Attachment B - Potential Sources of Contamination**. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

5. ☒ **Attachment C - Sequence of Major Activities**. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.

☒ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.

☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Tributary of Panther Creek

Temporary Best Management Practices (TBMPs)

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. All structural BMPs must be shown on the site plan.

7. ☒ **Attachment D – Temporary Best Management Practices and Measures**. TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

☒ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

☒ A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. ☐ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

   ☐ **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

   ☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. ☒ **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

    ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

    ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

    ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

    ☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.

11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

☒ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

Examples: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation.

17. ☒ **Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices**. A schedule of the interim and permanent soil stabilization practices for the site is attached.

18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. ☒ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

1.4.16 Spill Prevention and Control

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

(1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.

(2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.

(3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).

(4) Establish a continuing education program to indoctrinate new employees.

(5) Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

(1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.

(2) Store hazardous materials and wastes in covered containers and protect from vandalism.

(3) Place a stockpile of spill cleanup materials where it will be readily accessible.

(4) Train employees in spill prevention and cleanup.

(5) Designate responsible individuals to oversee and enforce control measures.

(6) Spills should be covered and protected from stormwater runon during rainfall to the extent that it doesn't compromise clean up activities.

(7) Do not bury or wash spills with water.

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.

(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

(10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.

(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

(12) Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills immediately.

(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.

(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

(2) Use absorbent materials on small spills rather than hosing down or burying the spill.

(3) Absorbent materials should be promptly removed and disposed of properly.

(4) Follow the practice below for a minor spill:

(5) Contain the spread of the spill.

(6) Recover spilled materials.

(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately:

(1) Contain spread of the spill.

(2) Notify the project foreman immediately.

(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.

(4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.

(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.

(3) Notification should first be made by telephone and followed up with a written report.

(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: http://www.tnrcc.state.tx.us/enforcement/emergency_response.html

Vehicle and Equipment Maintenance

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Discourage "topping off" of fuel tanks.

(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

TEMPORARY STORMWATER SECTION

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

During construction of this site, it is possible that there will be oil/grease and silt accumulation on the project site due to the equipment used to construct the roadways, utilities and residential lots. This may include fluid leaks from construction vehicles, hydrocarbons associated with asphalt paving, and washout from concrete trucks. Construction trash and/or debris not properly disposed of in appropriate containers are a potential source of contamination. The grading of rock and/or soil on the project site will create silt on the project site. The use of silt fences and construction exits will control the amount of silt and/or rock leaving the site.

Other potential sources of contamination include portable toilet spills or sewer contamination at the proposed sewer tie-ins. A soil berm would be constructed around the spill site and the affected area marked for further investigation and remediation.

ATTACHMENT C

SEQUENCE OF MAJOR ACTIVITIES

The sequence of major activities for Unit 9 construction with the approximate total disturbed area is as follows:

- Installation of Temporary Best Management Practices on the Project Site (0.20 acres)
- Grading and Basin Construction (0.20 acres)
- Building Construction (0.20 acres)
- Establish Vegetation and Cleanup (0.20 acres)
- Remove Temporary BMPs (0.20 acres)

ATTACHMENT D

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

The temporary Best Management Practices (BMP's) shall be installed as the first construction activity of the unit and will remain in place until all construction activities are complete and 70% of the vegetative cover has been established for that unit. The unit will have a designated construction exit, a silt fence along the down gradient side of the unit, inlet protection at storm drain inlets, and tree protection for the undisturbed trees where applicable. The existing native grasses will be left undisturbed in areas not under construction. Silt fence will be placed down gradient of all disturbed areas. The temporary BMP's shall be installed according to details on the Storm Water Pollution Prevention Plan detail sheet. The silt fences will be anchored six (6) inches into the soil and shall be monitored weekly for any failures of the silt fence or problems associated with silt build up.

a. There is no surface water, groundwater or storm water that originates upgradient from the site and flows across the site, silt fencing will be placed along the north portion of the site.

b. To prevent pollution of surface water or groundwater that originates onsite or flows offsite, including pollution caused by contaminated storm water runoff from the site, silt fencing will be placed along the down gradient sides of the site. A construction exit and concrete washout pit will also be installed at the entrance to the unit and a storage and refueling area will be designated on the site for each unit.

c. To prevent pollutants from entering surface streams, sensitive features, or the aquifer, the silt fence and rock berms mentioned in item (b) above will be installed. If sensitive features are identified during trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The owner must contact the TCEQ San Antonio Regional Office in writing within two working days of the discovery. The applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.

d. To maintain flow to naturally occurring sensitive features identified in the geologic assessment, inspections, or during construction, silt fencing or sand bag berms will be installed. If a feature must be sealed, processes must comply with Section 5.2 of the TGM RG-348 and Section 2.2 of the RG-348A.

ATTACHMENT E

REQUEST TO TEMPORARILY SEAL A FEATURE, IF SEALING A FEATURE

There will be no temporary sealing of naturally-occurring sensitive features on the site.

ATTACHMENT F

STRUCTURAL PRACTICES

Silt fences will be used on site to trap sediments and pollutants from leaving the areas of construction. Inlet protection will be utilized as necessary to protect drainage infrastructure from increases in sediment. A construction exit will be located at the entrance to the site to prevent mud and sediment from collecting on public roads. A concrete washout pit will be established to reduce contamination of pollutants from concrete waste, and prevent pollutant discharge to storm water runoff.

ATTACHMENT G

DRAINAGE AREA MAP (attached at the end of this section)

ATTACHMENT H

TEMPORARY SEDIMENT POND PLAN AND CALCULATIONS

Temporary sediment ponds are not required on this project because there will not be disturbance of any area greater than ten acres at one time during construction activities. Incremental areas will be stabilized for prevention of erosion as construction progresses. The silt fence will be replaced as necessary when mass grading activities require its replacement. The project site does not lend itself to the use of sedimentation basins or sediment traps to control the flow from runoff on the project site.

ATTACHMENT I

STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

_____

_____

_____

_____

REASONS FOR CHANGES:

_____

_____

_____

_____

INSPECTOR'S SIGNATURE: _____ DATE: _____

SILT FENCE

Description

This item shall consist of providing and placing a filter fabric fence including maintenance of the fence, removal of accumulated silt and removal of the fence upon completion of the project.

Materials

(1) Fabric

(a) General: The filter fabric shall be of nonwoven polypropylene, polyethylene or polyamide thermoplastic fibers with non-raveling edges. The fabric shall be non-biodegradable, inert to most soil chemicals, ultraviolet resistant, unaffected by moisture or other weather conditions, and permeable to water while retaining sediment. The filter fabric shall be supplied in rolls a minimum of 36 inches wide.

(b) Physical Requirements: The fabric shall meet the following requirements when sampled and tested in accordance with the methods indicated.

Physical Properties	Method	Requirements
Fabric Weight: (oz/sy)	TEX-616-J	4.5 minimum
Water Flow Rate: (gal/sq. ft/minute)	TEX-616-J	40 maximum
Equivalent Opening Size: US Standard sieve. (number)	CW-02215, US Army Corps of Engineers	40 to 100
Mullen Burst Strength: (psi)	ASTM D 3786	300 minimum
Ultraviolet Resistance; Strength retention: (%)	ASTM D 1682	70 minimum

(2) Posts: Posts shall be painted or galvanized steel Tee or Y-posts with anchor plates, not less than 5 feet in length with a minimum weight of 1.3 pounds per foot with a minimum Brinell Hardness of 143. Hangers shall be adequate to secure fence and fabric to posts. Posts and anchor plates shall conform to ASTM A 702.

(3) Wire Fence: Wire fence shall be welded wire fabric 2x4-W1. 0xW1.0 and shall conform to REINFORCING STEEL.

Construction Methods

The silt fence fabric shall be securely attached to the posts and the wire support fence with the bottom 12 inches of the filter material buried in a trench a minimum of 6 inches deep and 6 inches wide to prevent sediment form passing under the fence. When the silt fence is constructed on impervious material, a 12 inch flap of fabric shall be extended upstream from the bottom of the silt fence and weighted to limit particulate loss. No horizontal joints will be allowed in the filter fabric. Vertical joints shall be overlapped a minimum of 12 inches with the ends sewn or otherwise securely tied.

The silt fence shall be a minimum of 24 inches high. Posts shall be embedded a minimum of 12 inches in the ground, placed a maximum of 8 feet apart and set on a slight angle toward the anticipated runoff source. When directed by the Engineer, posts shall be set at specified intervals to support concentrated loads.

The silt fence shall be repaired, replaced, and/or relocated when necessary or as directed by the Engineer. Accumulated silt shall be removed when it reaches a depth of 6 inches.

Measurement

The work performed and the materials furnished under this item will be measured by the linear foot of “Silt Fence”, complete in place.

Payment

The work performed and materials furnished and measured as provided under “Measurement” will be paid for at the unit price bid per linear foot of “Silt Fence”. The price shall be full compensation for furnishing, hauling and placing all materials, labor, tools, equipment and incidentals necessary to complete the work including inspecting, repairing, replacing and relocating the fence, removal of silt and removal and disposal of all materials at the completion of construction in and revegetation of disturbed areas.

Payment will be made under:

Silt Fence for Erosion Control – Per Linear Foot.

END

STABILIZED CONSTRUCTION EXIT

Description

This item involves constructing a stabilized pad of crushed stone located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk or parking area. The purpose of a stabilized construction entrance is to reduce or eliminate the tracking or deposition of sediment onto public right-of-way.

Materials

Aggregate for construction shall conform to the following gradation:

Table 1: Aggregate Gradation Chart (TEX 401-A, Percent Retained)		
8 inch	5 inch	2 inch
0	90-100	100

Construction Methods

All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the excavation and construction of the entrance as indicated. The entrance shall not drain onto the public right-of-way or leave the construction site.

When necessary, vehicle wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse through use of sand bags, gravel, boards, silt fence or other approved methods.

The entrance shall be maintained in a condition which will prevent tracking or disposition of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.

Measurement

Acceptable work performed as prescribed in this item will be measured by unit of each stabilized construction entrance installed.

Payment

Work performed and materials furnished under this item shall be paid for at the unit price bid per each.

Payment, when included as a contract pay item, will be made under:

Stabilized Construction Entrance – Per Each

END

INSPECTIONS

DATE OF INSPECTION	CONTROL INSPECTED	OBSERVATIONS	COMPLIANCE WITH SWPPP		INSPECTOR'S SIGNATURE	TITLE/ QUALIFICATIONS
			YES	NO		

RECORD OF CONSTRUCTION ACTIVITY

DATE STARTED	DATE ENDED	TYPE OF ACTIVITY	CONTROL MEASURES	INSPECTOR SIGNATURE	TITLE/ COMPANY

NON-STORMWATER DISCHARGES

DATE	INSPECTOR	TITLE	COMPANY	DISHARGE TYPE	POLLUTION CONTROL MEASURE

CONSTRUCTION MATERIALS

DATE STORED ONSITE	DATE REMOVED FROM SITE	DESCRIPTION	INSPECTOR'S SIGNATURE	TITLE	COMPANY

STABILIZATION RECORD

CONSTRUCTION/GRADING		STABILIZATION			SIGNATURE		
DATE BEGAN	DATE ENDED	DATE BEGAN	AREA OF SITE STABILIZATION	TYPE OF STABILIZATION USED	INSPECTOR	TITLE	COMPANY

RAINFALL DATA

DATE OF RECORDED RAINFALL	AMOUNT OF RAINFALL (INCHES)	SIGNATURE OF INSPECTOR	TITLE/COMPANY

SUBCONTRACTOR RESPONSIBILITIES

				INITIALS	
DATE	SUBCONTRACTOR COMPANY	CONSTRUCTION ACTIVITY TO BE PERFORMED	DESCRIPTION OF POLLUTION PREVENTION RESPONSIBILITY	SUBCONTRACTOR	CONTRACTOR

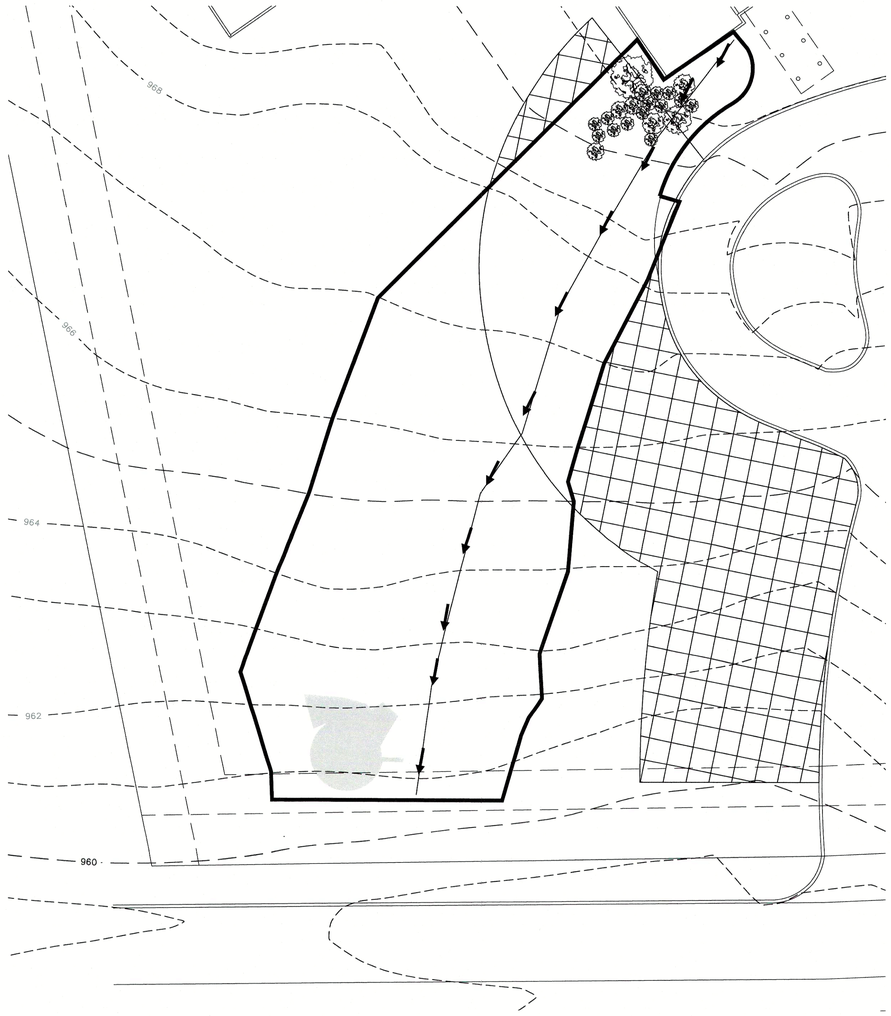
ATTACHMENT J

SCHEDULED INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Stabilization practices used on this site may include, but are not limited to, establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, seeding, vegetative buffer strips, protection of trees, protection of mature vegetation and other appropriate measures.

Infrastructure construction activities on this site include roadway excavation, utility installation, drainage construction, preliminary site grading, site cleanup, and permanent stabilization, final site grading and final site road construction. Home construction phase activities for this site include construction of house and lot grading, site cleanup and stabilization for individual lots. After all sanitary sewer construction has been completed; final stabilization of the construction area on all unpaved areas and areas not covered by permanent structures shall be completed by even distribution of 70% of the native background vegetative cover or equivalent permanent stabilization measures.

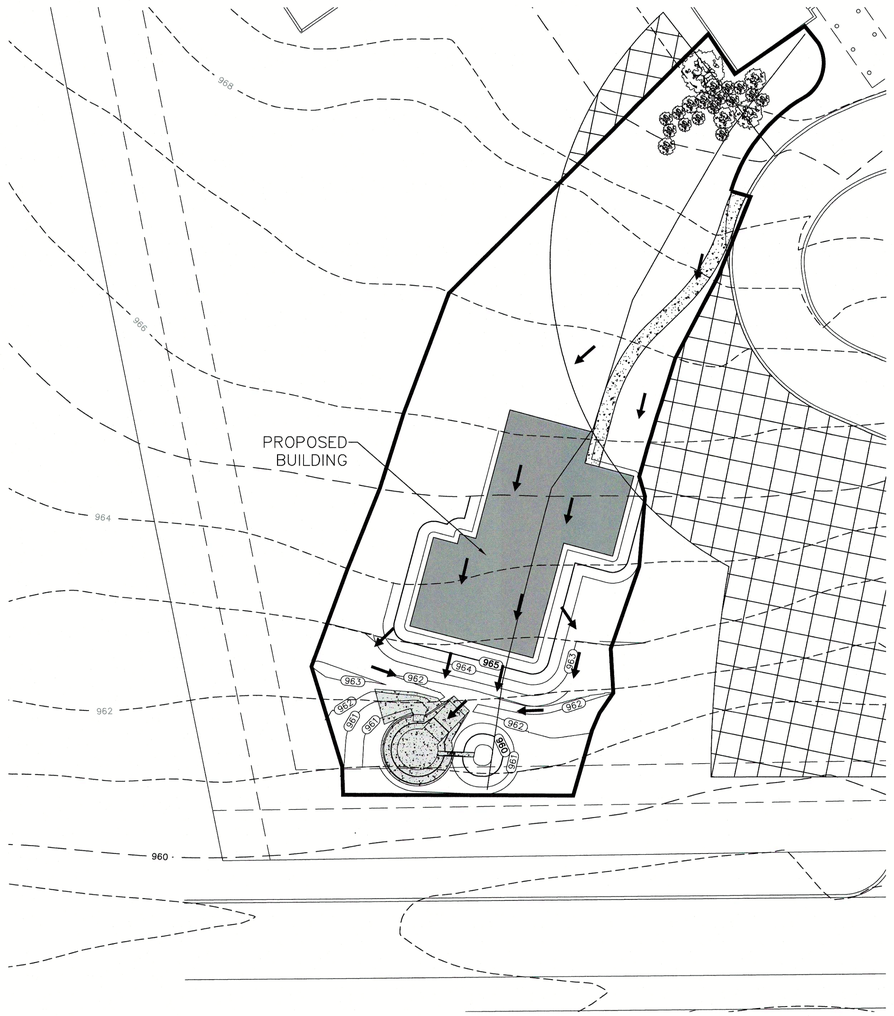


EXISTING CONDITION

SCALE: 1"=20'

Time of Concentration Worksheet

	Point		1	2
	Areas			
			EX.	PROP./ULT.
Overland	Length	ft	293	122
(1st Area)	n		0.400	0.400
	slope	ft/ft	0.043	0.038
	Tc	min	16.00	10.97
		hr	0.27	0.18
Overland	Length	ft	0	0
(2nd Area)	n		0.400	0.020
	slope	ft/ft	0.040	0.024
	Tc	min	0.00	0.00
		hr	0.00	0.00
Concentrated	Length	ft	0	125
(Unpaved)	Slope	ft/ft	0.010	0.040
	Velocity	ft/sec	1.61	3.23
	Tt	min	0.00	0.65
		hr	0.00	0.01
Concentrated	Length	ft	0	0
(Paved)	Slope	ft/ft	0.005	0.010
	Velocity	ft/sec	1.44	2.03
	Tt	min	0.00	0.00
		hr	0.00	0.00
Channel	Length	ft	0	0
	Velocity	ft/sec	6.00	6.00
	Tt	min	0.00	0.00
		hr	0.00	0.00
Total Time of Concentration		**min**	**16.0**	**11.6**
		hr	**0.27**	**0.19**



PROPOSED CONDITION

PA-2 Existing Onsite Peak Flows

REFERENCE POINT	Drainage Areas	C	Drainage Area (ac)	Tc (min)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(100) (in/hr)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(100) (cfs)
1	DA 1	0.39	0.32	16.0	5.14	5.99	7.14	8.94	0.64	0.75	0.89	1.12

PA-2 Proposed/Ultimate Onsite Peak Flows

REFERENCE POINT	Drainage Areas	C	Drainage Area (ac)	Tc (min)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(100) (in/hr)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(100) (cfs)
2	DA 1	0.85	0.32	11.6	6.01	7.02	8.38	10.58	1.63	1.91	2.28	2.88

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL • ENVIRONMENTAL • SURVEY
12340 Country Parkway San Antonio, TX 78216
Telephone (210) 349-3271
Firm Registration No: F-159
TBPLS Firm Registration No: 10004100

REVISIONS			
1			
2			
3			
4			
Δ	DESC.		DATE

FOR: AGUDAS ACHIM CONGREGATION

HYDROGOLY MAP

AGUDAS ACHIM WPAP MODIFICATION
SAN ANTONIO, TEXAS

DATE: NOV 2019

Vertical Scale 1"=N/A
Horizontal Scale 1"= 20'
0 10' 20' 30'

SHEET 4 OF 5

PROJ NO. 1422-014

PAUL A. SCHROEDER 57504 REGISTERED PROFESSIONAL ENGINEER
1-31-20

Jan 31, 2020 - 3:33pm
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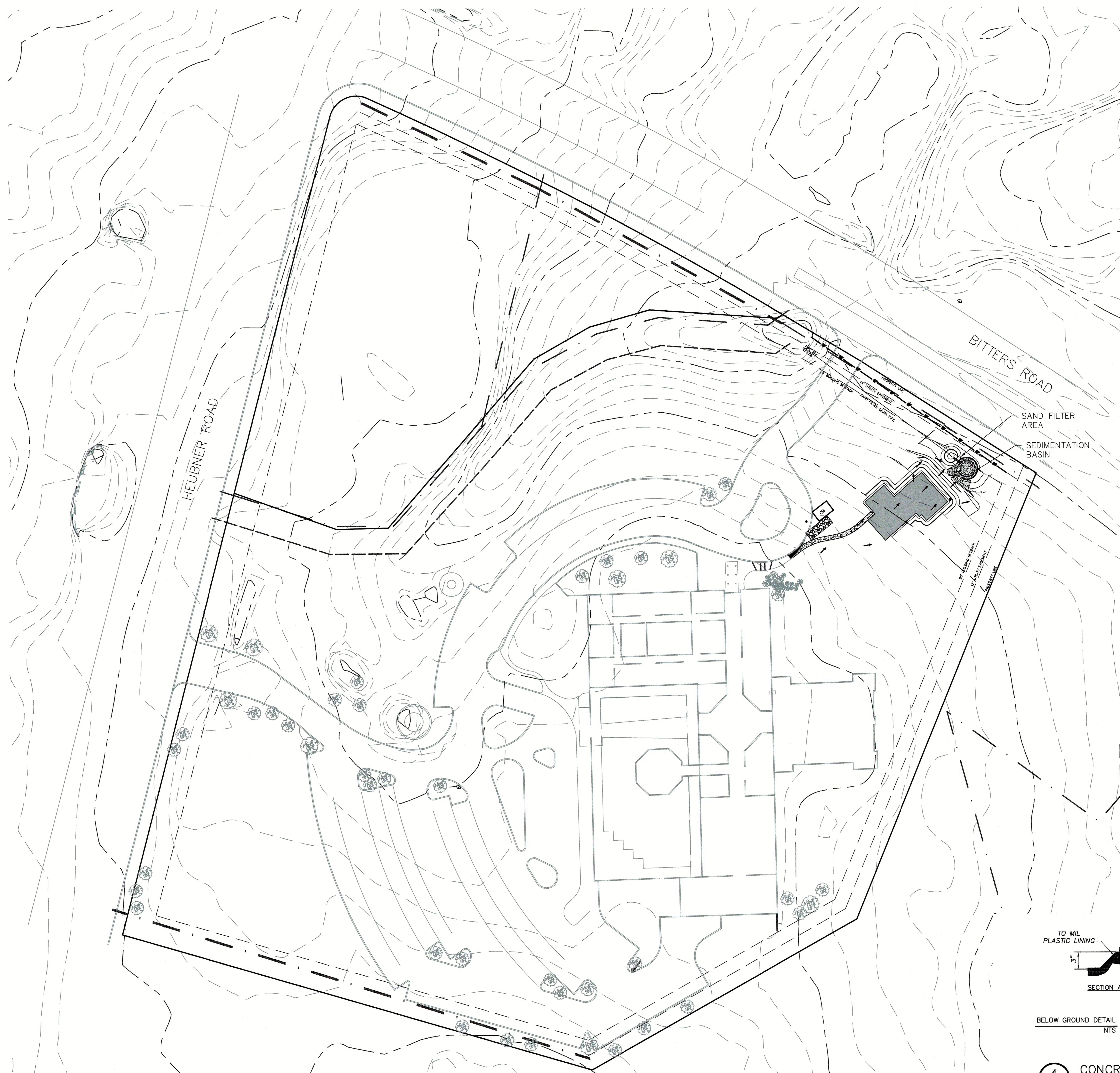
DRAWN BY: DHS CHECKED BY: PAS APPROVED BY: PAS

LEGEND

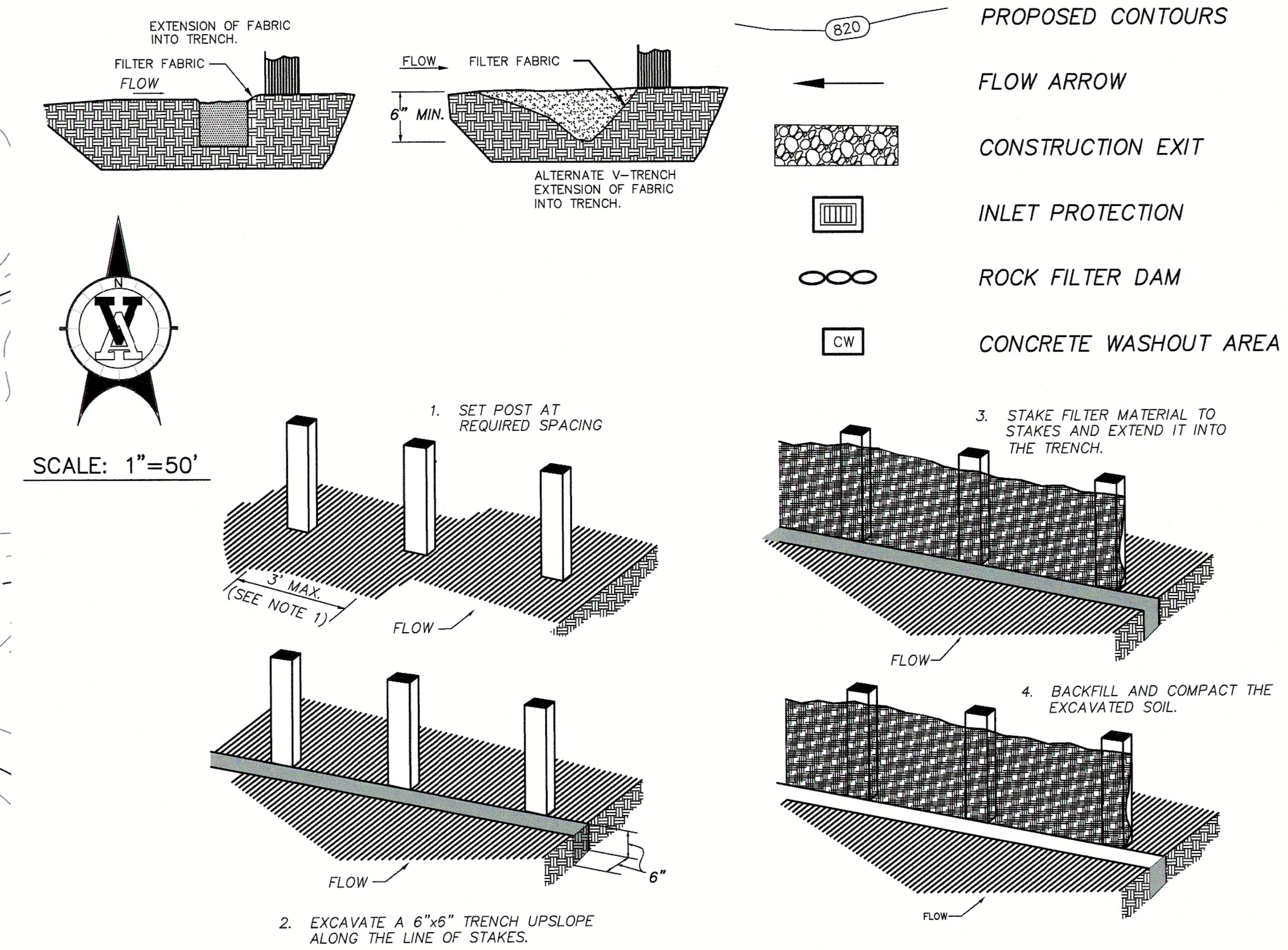
- SF — SILT FENCE
- 820 — EXISTING CONTOURS
- (820) — PROPOSED CONTOURS
- FLOW ARROW
- CONSTRUCTION EXIT
- INLET PROTECTION
- ROCK FILTER DAM
- CW — CONCRETE WASHOUT AREA



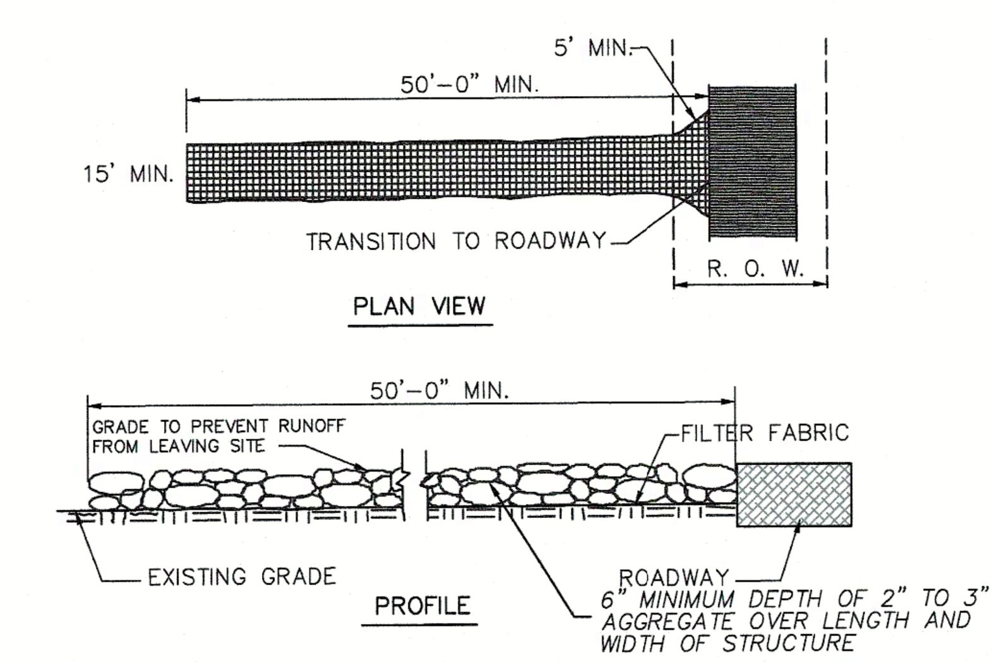
SCALE: 1"=50'

GENERAL NOTES:

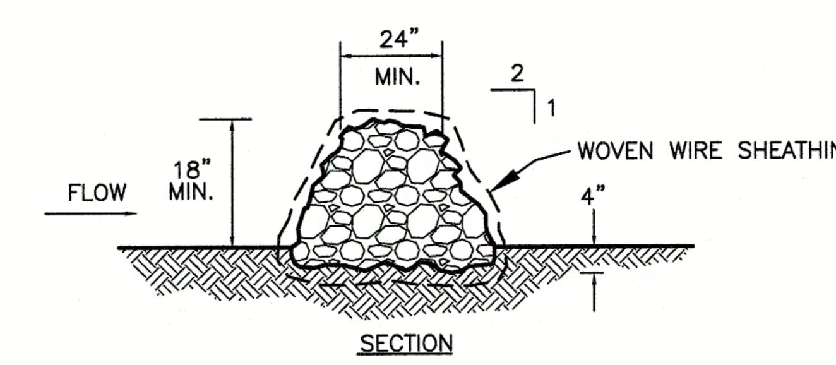
1. POSTS TO BE SET AT 3-FOOT MAXIMUM SPACING. IF FACTORY PRE ASSEMBLED FENCE WITH SUPPORT NETTING IS USED. SPACING OF POST MAY BE INCREASED TO 8 FEET MAXIMUM.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.



1 SILT FENCE
N.T.S.

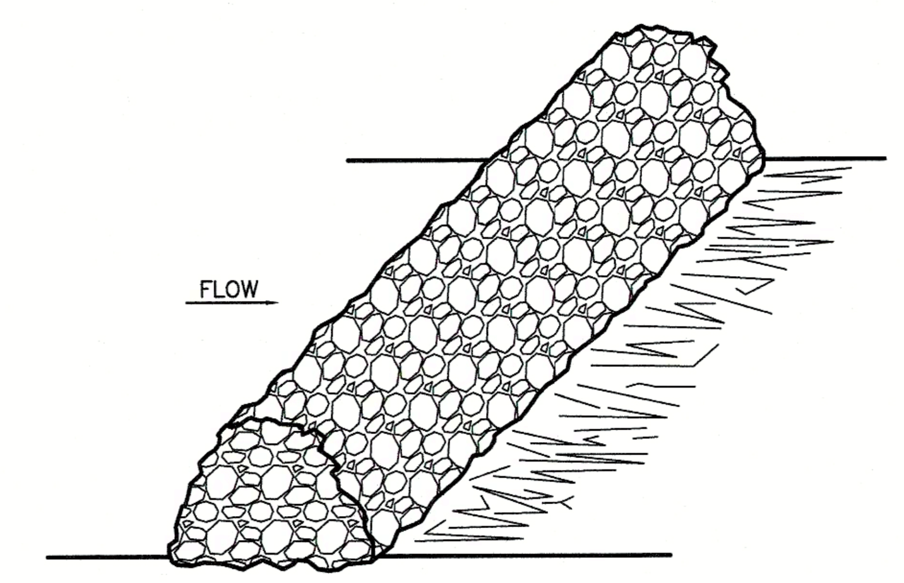


2 STABILIZED CONSTRUCTION EXIT
N.T.S.



ROCK BERM NOTES:

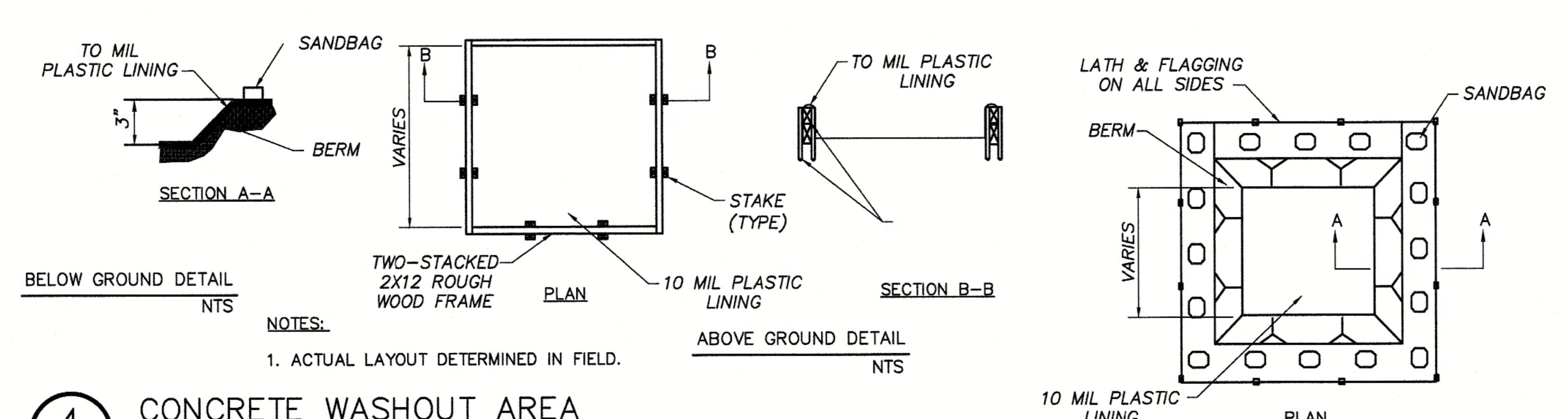
1. USE ONLY OPEN GRADED ROCK 100 to 200 mm (4 to 8") DIAMETER FOR STREAM FLOW CONDITIONS. USE OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE). ROCK BERMS IN CHANNEL APPLICATIONS SHALL BE ANCHORED FIRMLY INTO THE SUBSTRATE A MINIMUM OF 150 mm (6 ") WITH T-POSTS OR WITH 15M OR 20M (#5 OR #6) REBAR, WITH MAXIMUM SPACING APART OF 1.2 m (48") ON CENTER.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SILTATION
5. DAILY INSPECTION SHALL BE MADE ON SEVERE-SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 150 mm (6").
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.



3 ROCK FILTER DAM
NTS

NOTE:

1. CONTRACTOR TO PROVIDE TREE PROTECTION IN ACCORDANCE WITH CITY OF FAIR OAKS RANCH STANDARD DETAILS AND THE APPROVED TREE PRESERVATION PLAN.
2. CONTRACTOR TO REVEGETATE REQUIRED AREA IN ACCORDANCE WITH CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION ITEM 520 HYDROMULCHING.



NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.

4 CONCRETE WASHOUT AREA

ORIGINAL CZP PERMIT # 13-97020601

PAUL A. SCHROEDER 57064 REGISTERED PROFESSIONAL ENGINEER ©2019

1-31-20

REVISIONS	DESC.	DATE
1		
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FOR: AGUDAS ACHIM CONGREGATION

SW3P SITE PLAN
AGUDAS ACHIM WPAP MODIFICATION
SAN ANTONIO, TEXAS

DATE: NOV 2019

Vertical Scale 1"=N/A
Horizontal Scale 1"=50'
0 25' 50' 75'

SHEET 1 OF 1

PROJ NO. 1422-014

Feb 05, 2020 - 11:40am
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DRAWN BY: DHS CHECKED BY: PAS APPROVED BY: PAS

Permanent Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(C), (D)(Ii), (E), and (5), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

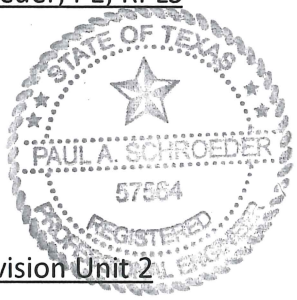
Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Permanent Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Paul A. Schroeder, PE, RPLS

Date: 12/5/19

Signature of Customer/Agent



Regulated Entity Name: Agudas Achim Subdivision Unit 2

Permanent Best Management Practices (BMPs)

Permanent best management practices and measures that will be used during and after construction is completed.

1. ☒ Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.

   ☐ N/A

2. ☒ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

   ☒ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

☐ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____

☐ N/A

3. ☒ Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.

   ☐ N/A

4. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

   ☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.
   ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
   ☒ The site will not be used for low density single-family residential development.

5. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

   ☐ **Attachment A - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
   ☒ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
   ☐ The site will not be used for multi-family residential developments, schools, or small business sites.

6. ☒ **Attachment B - BMPs for Upgradient Stormwater**.

☒ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.

☒ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.

☐ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

7. ☒ **Attachment C - BMPs for On-site Stormwater**.

   ☒ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.

   ☐ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

8. ☐ **Attachment D - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.

   ☒ N/A

9. ☒ The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

   ☒ The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.

   ☐ **Attachment E - Request to Seal Features**. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.

10. ☒ **Attachment F - Construction Plans**. All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:

    ☒ Design calculations (TSS removal calculations)

    ☒ TCEQ construction notes

    ☐ All geologic features

    ☒ All proposed structural BMP(s) plans and specifications

    ☐ N/A

11. ☒ **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan**. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:

    ☒ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☒ Signed by the owner or responsible party
    ☒ Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
    ☒ A discussion of record keeping procedures

    ☐ N/A

12. ☐ **Attachment H - Pilot-Scale Field Testing Plan**. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

    ☒ N/A

13. ☒ **Attachment I -Measures for Minimizing Surface Stream Contamination**. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.

    ☐ N/A

Responsibility for Maintenance of Permanent BMP(s)

Responsibility for maintenance of best management practices and measures after construction is complete.

14. ☒ The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

    ☐ N/A

15. ☒ A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

    ☐ N/A

PERMANENT STORMWATER SECTION
ATTACHMENTS

ATTACHMENT A – 20% OR LESS IMPERVIOUS COVER WAIVER

A waiver is not applicable for this site.

ATTACHMENT B-BMPS FOR UPGRADIENT STORMWATER

There is no upgradient storm water flowing across the project site.

ATTACHMENT C–BMPs FOR ON-SITE STORMWATER

The stormwater from this site will be directed through the project site in grass swales to the north where it will enter a sand filter basin.

ATTACHMENT D-BMPS FOR SURFACE STREAMS

There are no surface streams or features identified in the Geologic Assessment within the project limits. Runoff will be treated by a sand filter basin.

ATTACHMENT E–REQUEST TO SEAL A FEATURE

N/A

ATTACHMENT F–CONSTRUCTION PLANS

Plan set included.

ATTACHMENT G–INSPECTION, MAINTENANCE, AND TECHNICAL GUIDANCE FOR BMPS

Attached at the end of this section

ATTACHMENT H – PILOT-SCALE FIELD TESTING PLAN, IF BMPS NOT BASED ON *COMPLYING WITH THE EDWARDS AQUIFER RULES: TECHNICAL GUIDANCE FOR BMPS*

N/A

ATTACHMENT I–MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

This project will not result in increased stream flashing, stronger flows, increase in stream velocities or other degradation in water quality. The construction of the sand filtration basin will result in detention of increased flows. The basin discharge is to an existing concrete surface; and therefore will not cause erosion or “flashing”.

BASIN AND VEGETATIVE FILTER STRIP

Inspection, Maintenance, Repair Plan Sand

Filter Systems

Regular, routine maintenance is essential to effective, long-lasting performance of sand filters. Neglect or failure to service the filters on a regular basis will lead to poor performance and eventual costly repairs. It is recommended that sand filter BMPs be inspected on a quarterly basis and after large storms for the first year of operation. This intensive monitoring is intended to ensure proper operation and provide maintenance personnel with a feel for the operational characteristics of the filter. Subsequent inspections can be limited to semi-annually or more often if deemed necessary (Young et al., 1996). The WPAP responsible party shall maintain copies of inspection reports onsite and shall retain copies on file for a period of 3 years. The reports shall include the date of the inspection, the name of the inspector, the reason for the inspection (i.e. rainfall, weekly routine, visible damage), the results of the inspection, and any action taken to maintain or repair these facilities.

Certain construction and maintenance practices are essential to efficient operation of the filter. The biggest threat to any filtering system is exposure to heavy sediment loads that clog the filter media. Construction within the watershed should be complete prior to exposing the filter to stormwater runoff. All exposed areas should be stabilized to minimize sediment loads. Runoff from any unstabilized construction areas should be treated via a separate sediment system that bypasses the filter media.

Another important consideration in constructing the filter bed is to ensure that the top of the media is completely level. The filter design is based on the use of the entire filter media surface area; a sloped filter surface would result in disproportionate use of the filter media.

Inspections. During construction the BMP facilities shall be inspected every 7 days and within 24 hours of any storm event greater than 0.5" of rainfall. After construction areas are stabilized, BMP facilities must be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. During each inspection, erosion areas inside and downstream of the BMP must be identified and repaired or revegetated immediately. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) must be identified and repaired immediately. Cracks, voids and undermining should be patched/filled to prevent additional structural damage. Trees and root systems should be removed to prevent growth in cracks and joints that can cause structural damage.

Sediment Removal. Remove sediment from the inlet structure and sedimentation chamber when sediment buildup reaches a depth of 6 inches or when the proper functioning of inlet and outlet structures is impaired. Sediment should be cleared from the inlet structure at least every year and from the sedimentation basin at least every 5 years.

Media Replacement. Maintenance of the filter media is necessary when the drawdown time exceeds 48 hours. When this occurs, the upper layer of sand should be removed and replaced with new material meeting the original specifications. Any discolored sand should also be removed and replaced. In filters that have been regularly maintained, this should be limited to the top 2 to 3 inches. Debris and Litter Removal. Debris and litter will accumulate near the sedimentation basin outlet device and should be removed during regular mowing

operations and inspections. Particular attention should be paid to floating debris that can eventually clog the control device or riser.

Filter Underdrain. Clean underdrain piping network to remove any sediment buildup as needed to maintain design drawdown time.

Mowing. Grass areas in and around sand filters must be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. Vegetation on the pond embankments should be mowed as appropriate to prevent the establishment of woody vegetation.

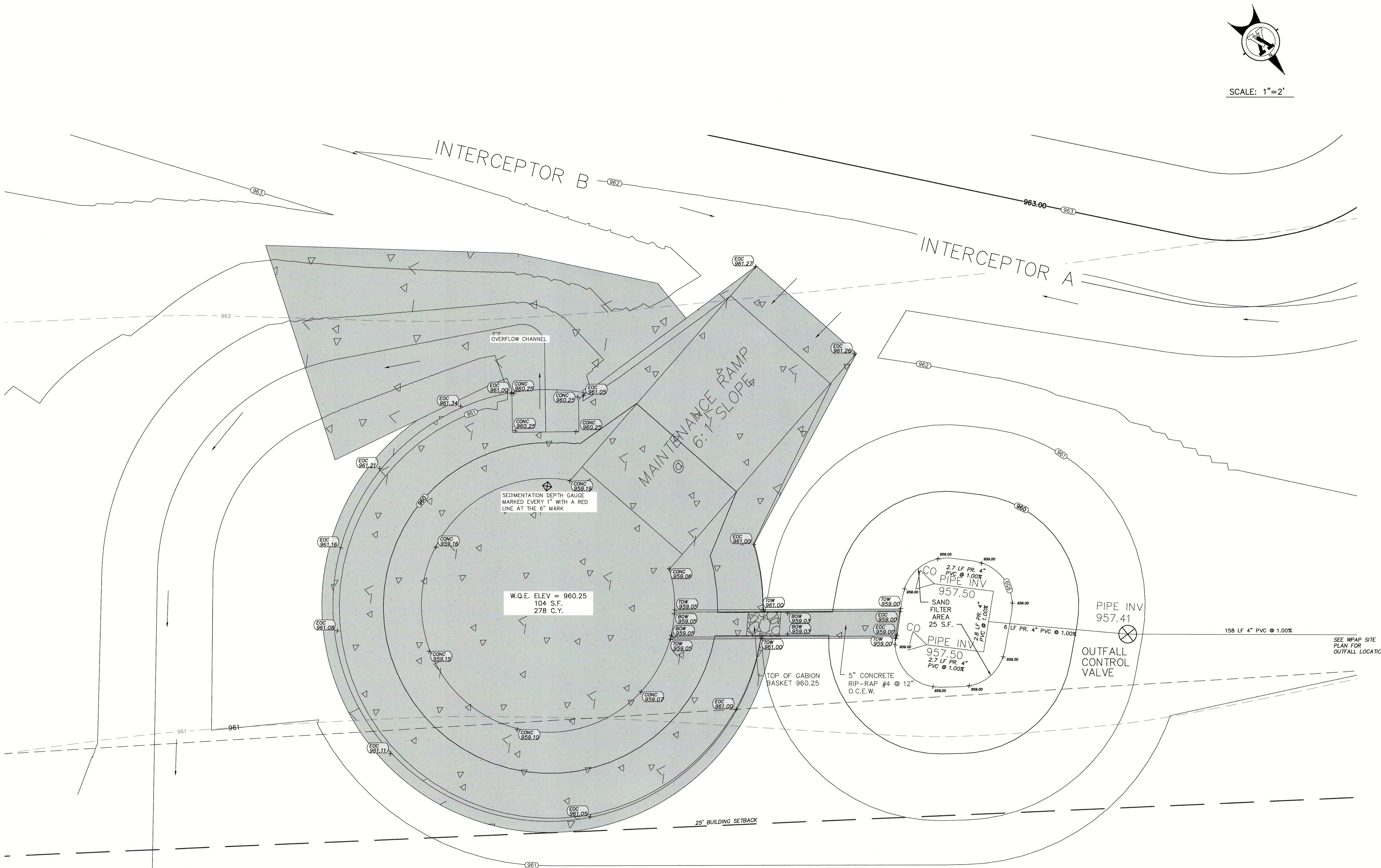
Congregation Agudas Achim — 11-14-19

Owner — Date

Linda D. Mead — 11-14-19

Owner's Agent — Date

12-5-19



CO – SEE DETAIL SHEET FOR CLEANOUT DETAIL

BASIN
WATER QUALITY VOLUME REQUIRED = 250 C.F.
WATER QUALITY VOLUME PROVIDED = 278 C.F.
FILTER BASIN AREA REQUIRED = 21 S.F.
FILTER BASIN AREA PROVIDED = 25 S.F.

STATE OF TEXAS
PAUL A. SCHROEDER
57534
REGISTERED PROFESSIONAL ENGINEER
1-31-20

©2019

REVISIONS

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VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL • ENVIRONMENTAL • SURVEY
12940 Country Parkway San Antonio, TX 78216
Telephone: (210) 349-3271
Firm Registration No: F-159
TBPLS Firm Registration No: 10004100

FOR: AGUDAS ACHIM CONGREGATION

BASIN PLAN
AGUDAS ACHIM WPAP MODIFICATION
SAN ANTONIO, TEXAS

DATE: NOV 2019
Vertical Scale 1"=N/A
Horizontal Scale 1"=
0

SHEET 2 OF 5

PROJ NO.

Jan 31, 2020 – 3:33pm
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DRAWN BY: DHS CHECKED BY: PAS APPROVED BY: PAS

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: **AGUDAS ACHIM**
Date Prepared: **########**

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project
County = **Bexar**
Total project area included in plan * = **0.32** acres
Predevelopment impervious area within the limits of the plan * = **0.00** acres
Total post-development impervious area within the limits of the plan* = 0.06 acres
Total post-development impervious cover fraction * = 0.18
P = 30 inches

$L_{M\ TOTAL\ PROJECT}$ = **47** lbs.

*** The values entered in these fields should be for the total project area.**

Number of drainage basins / outfalls areas leaving the plan area = **1**

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area = **0.32** acres
Predevelopment impervious area within drainage basin/outfall area = **0.00** acres
Post-development impervious area within drainage basin/outfall area = **0.06** acres
Post-development impervious fraction within drainage basin/outfall area = **0.18**
$L_{M\ THIS\ BASIN}$ = **47** lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Sand Filter**
Removal efficiency = **89** percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C = **0.32** acres
A_I = **0.06** acres
A_P = **0.26** acres
L_R = **59** lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = **47** lbs.

F = **0.79**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth = **1.04** inches
Post Development Runoff Coefficient = **0.19**
On-site Water Quality Volume = **233** cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP = **0.00** acres
Off-site Impervious cover draining to BMP = **0.00** acres
Impervious fraction of off-site area = **0**
Off-site Runoff Coefficient = **0.00**
Off-site Water Quality Volume = **0** cubic feet
Storage for Sediment = **47**
Total Capture Volume (required water quality volume(s) x 1.20) = 279 cubic feet
The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate = 0.1 in/hr **Enter determined permeability rate or assumed value of 0.1**
Irrigation area = NA square feet
NA acres

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin = **NA** cubic feet

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **279** cubic feet

Minimum filter basin area = **13** square feet

Maximum sedimentation basin area = **116** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **29** square feet **For maximum water depth of 8 feet**

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **279** cubic feet

Minimum filter basin area = **23** square feet

Maximum sedimentation basin area = **93** square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area = **6** square feet **For maximum water depth of 8 feet**

10. Bioretention System Designed as Required in RG-348 Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins Designed as Required in RG-348 Pages 3-66 to 3-71

Required capacity of Permanent Pool = **NA** cubic feet **Permanent Pool Capacity is 1.20 times the WQV**
Required capacity at WQV Elevation = **NA** cubic feet **Total Capacity should be the Permanent Pool Capacity**

Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

The following/listed "construction notes" are intended to be advisory in nature only and do not constitute an approval or conditional approval by the Executive Director (ED), nor do they constitute a comprehensive listing of rules or conditions to be followed during construction. Further actions may be required to achieve compliance with TCEQ regulations found in Title 30, Texas Administrative Code (TAC), Chapters 213 and 217, as well as local ordinances and regulations providing for the protection of water quality. Additionally, nothing contained in the following/listed "construction notes" restricts the powers of the ED, the commission or any other governmental entity to prevent, correct, or curtail activities that result or may result in pollution of the Edwards Aquifer or hydrologically connected surface waters. The holder of any Edwards Aquifer Protection Plan containing "construction notes" is still responsible for compliance with Title 30, TAC, Chapters 213 or any other applicable TCEQ regulation, as well as all conditions of an Edwards Aquifer Protection Plan through all phases of plan implementation. Failure to comply with any condition of the ED's approval, whether or not in contradiction of any "construction notes," is a violation of TCEQ regulations and any violation is subject to administrative rules, orders, and penalties as provided under Title 30, TAC § 213.10 (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. The following/listed "construction notes" in no way represent an approved exception by the ED to any part of Title 30 TAC, Chapters 213 and 217, or any other TCEQ applicable regulation

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
   - the name of the approved project;
   - the activity start date; and
   - the contact information of the prime contractor.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan (WPAP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature(s) (caves, solution cavity, sink hole, etc.) is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. Construction activities may not be resumed until the TCEQ has reviewed and approved the appropriate protective measures in order to protect any sensitive feature and the Edwards Aquifer from potentially adverse impacts to water quality.
4. No temporary or permanent hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.
5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the approved plans and manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.
6. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.
7. Sediment must be removed from the sediment traps or sedimentation basins not later than when it occupies 50% of the basin's design capacity.

8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. If portions of the site will have a temporary or permanent cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.
11. The following records shall be maintained and made available to the TCEQ upon request:
    - the dates when major grading activities occur;
    - the dates when construction activities temporarily or permanently cease on a portion of the site; and
    - the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

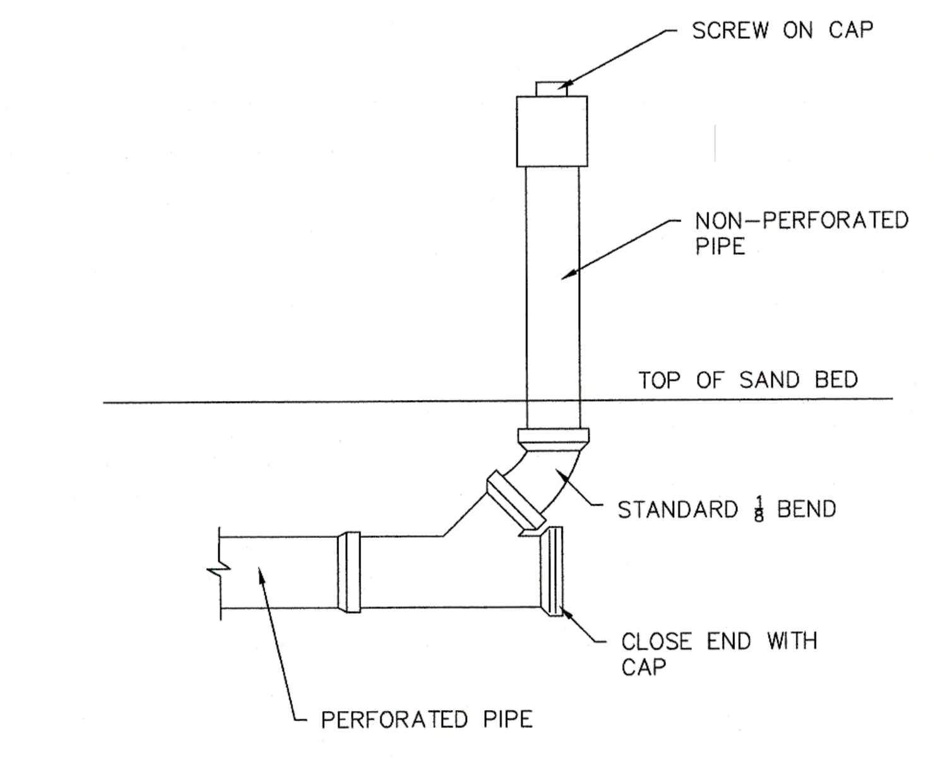
Austin Regional Office	San Antonio Regional Office
12100 Park 35 Circle, Building A Austin, Texas 78753-1808 Phone (512) 339-2929 Fax (512) 339-3795	14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

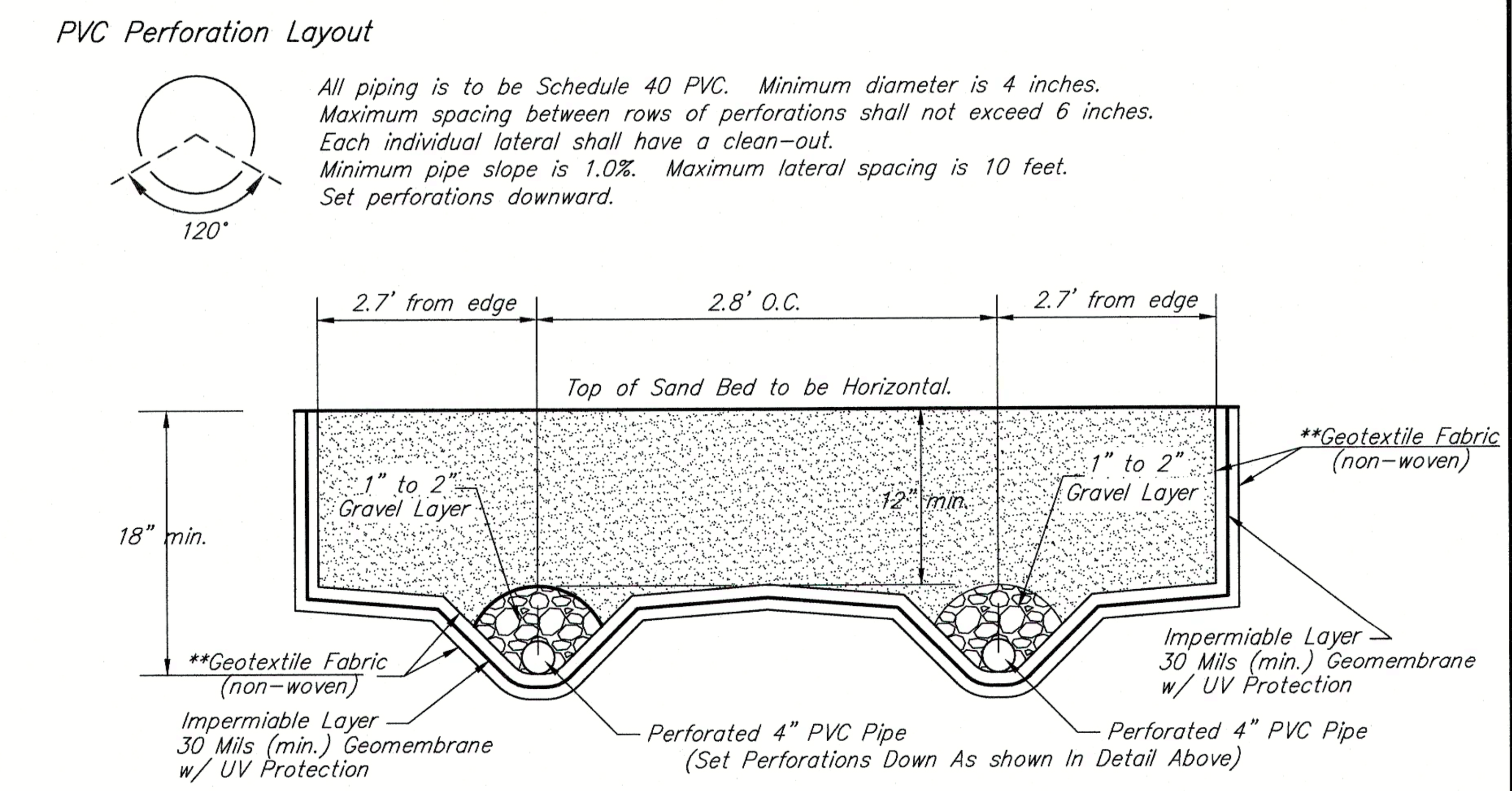
Geotextile Fabric Specifications (COA, 2004)

Property	Test Method	Unit	Specification (min.)
Unit Weight	ASTM D-5261	oz/sq.yd.	8
Filtration Rate	ASTM D-4491	CM/sec	0.20
Puncture Strength	ASTM D-4833	lb	125
Mullen Burst Strength	ASTM D-3786	psi	400
Tensile Strength	ASTM D-4632	lb	200
Equiv. Opening Size	U.S. Standard Sieve	No.	80

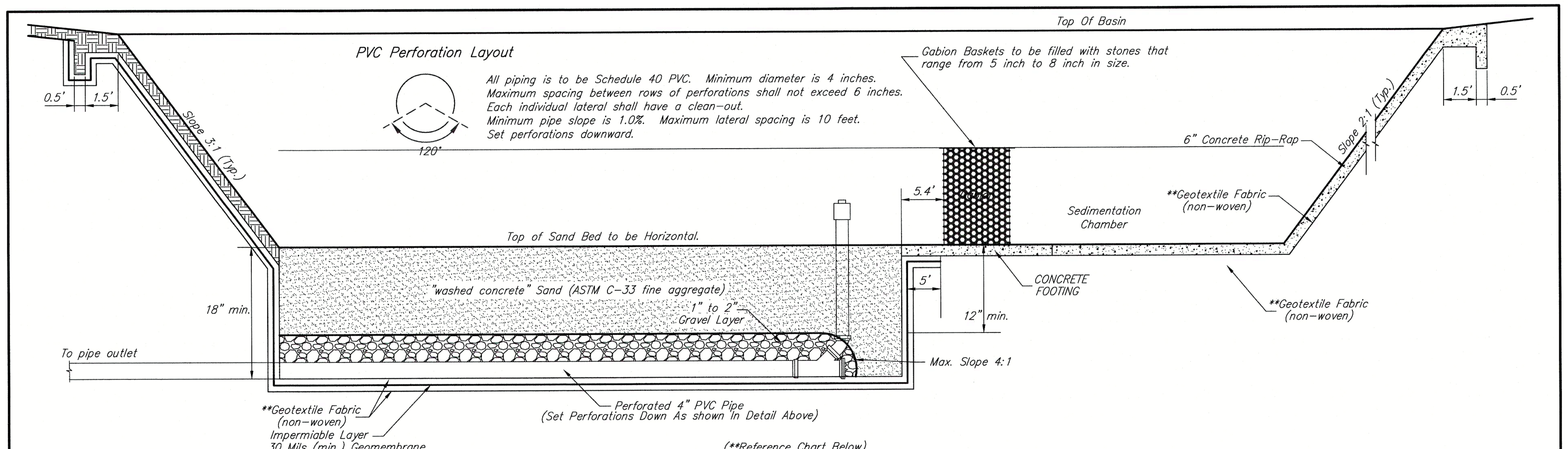
**modified*



CLEAN OUT DETAIL
N.T.S.



(**Reference Chart Below)
SAND BED PROFILE (TRENCH DESIGN)
N.T.S.



(**Reference Chart Below)
BASIN PROFILE
N.T.S.

REVISIONS
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VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL • ENVIRONMENTAL • SURVEY
12940 Country Parkway San Antonio, TX 78216
Telephone: (210) 349-3271
Firm Registration No: F-159
TBPLS Firm Registration No: 10004100

FOR: AGUDAS ACHIM CONGREGATION

BASIN DETAIL SHEET
AGUDAS ACHIM WPAP MODIFICATION
SAN ANTONIO, TEXAS

PAUL A. SCHROEDER 57504 REGISTERED PROFESSIONAL ENGINEER
2-11-20
©2019

DATE: NOV 2019
Vertical Scale 1"=N/A
Horizontal Scale 1"=
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SHEET 3 OF 5
PROJ NO.

Feb 11, 2020 – 2:02pm
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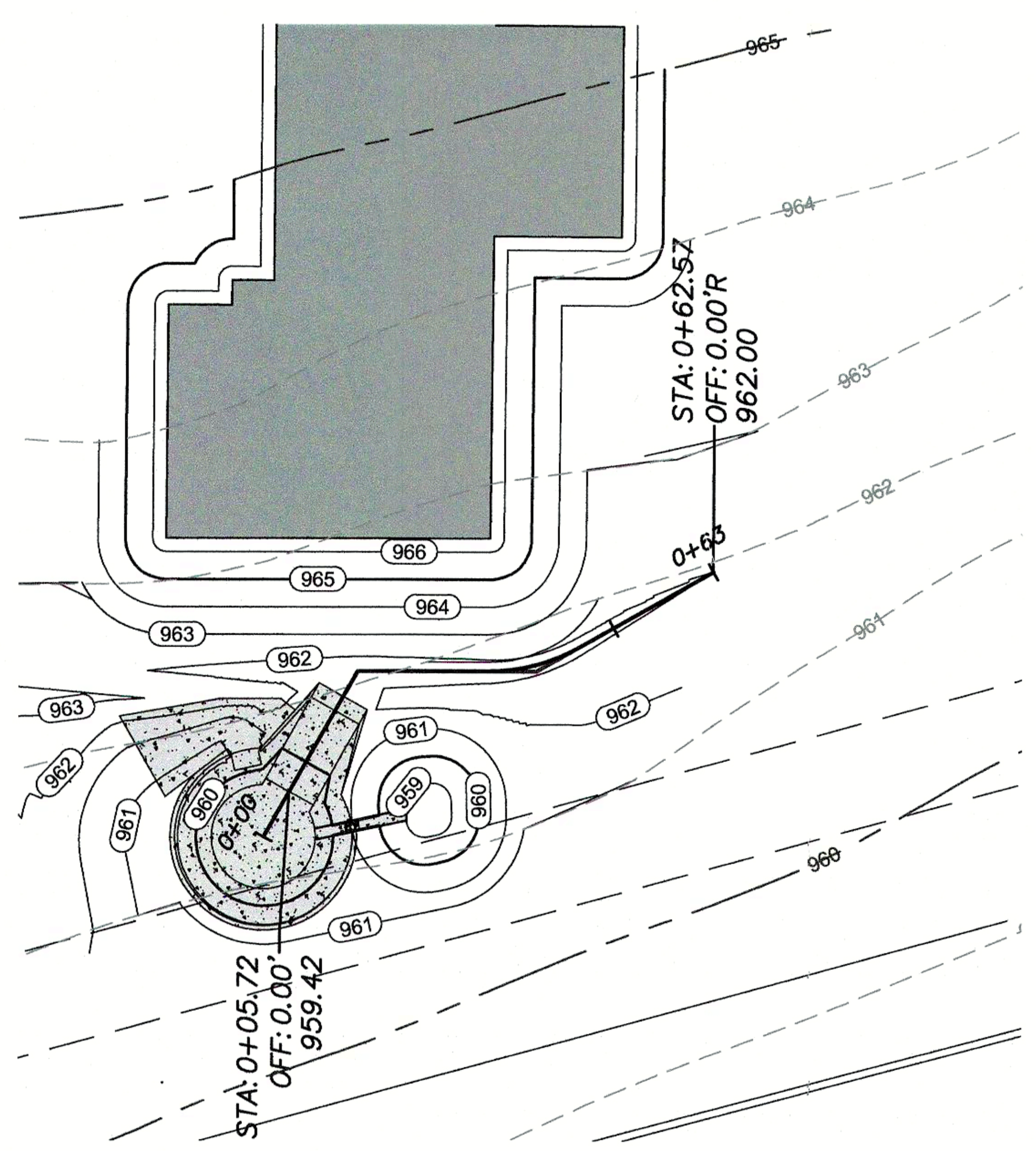
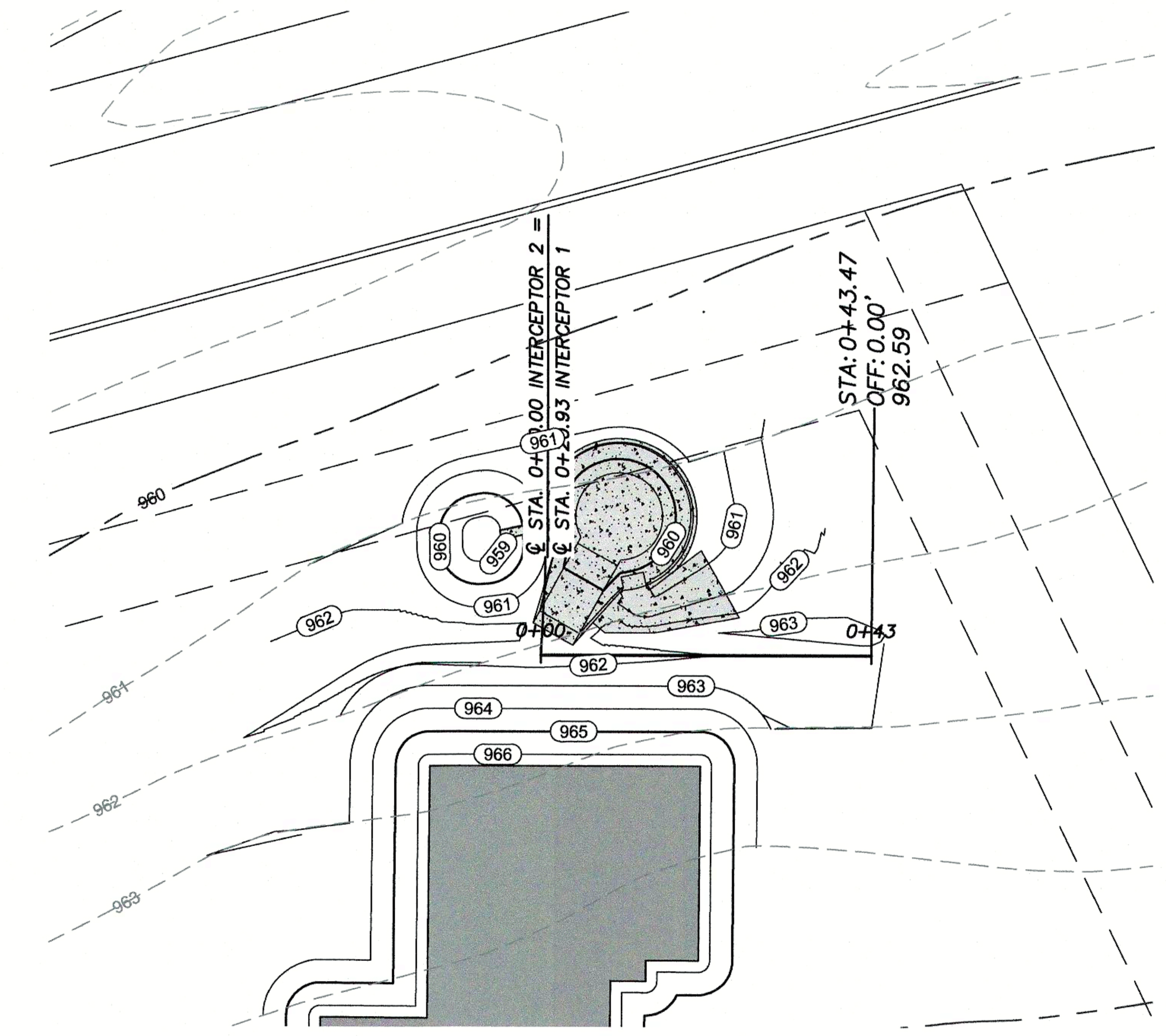
DRAWN BY: DHS CHECKED BY: PAS APPROVED BY: PAS

SCALE: 1"=20'



INTERCEPTOR A

SCALE: 1"=20'



INTERCEPTOR B

PLAN LEGEND

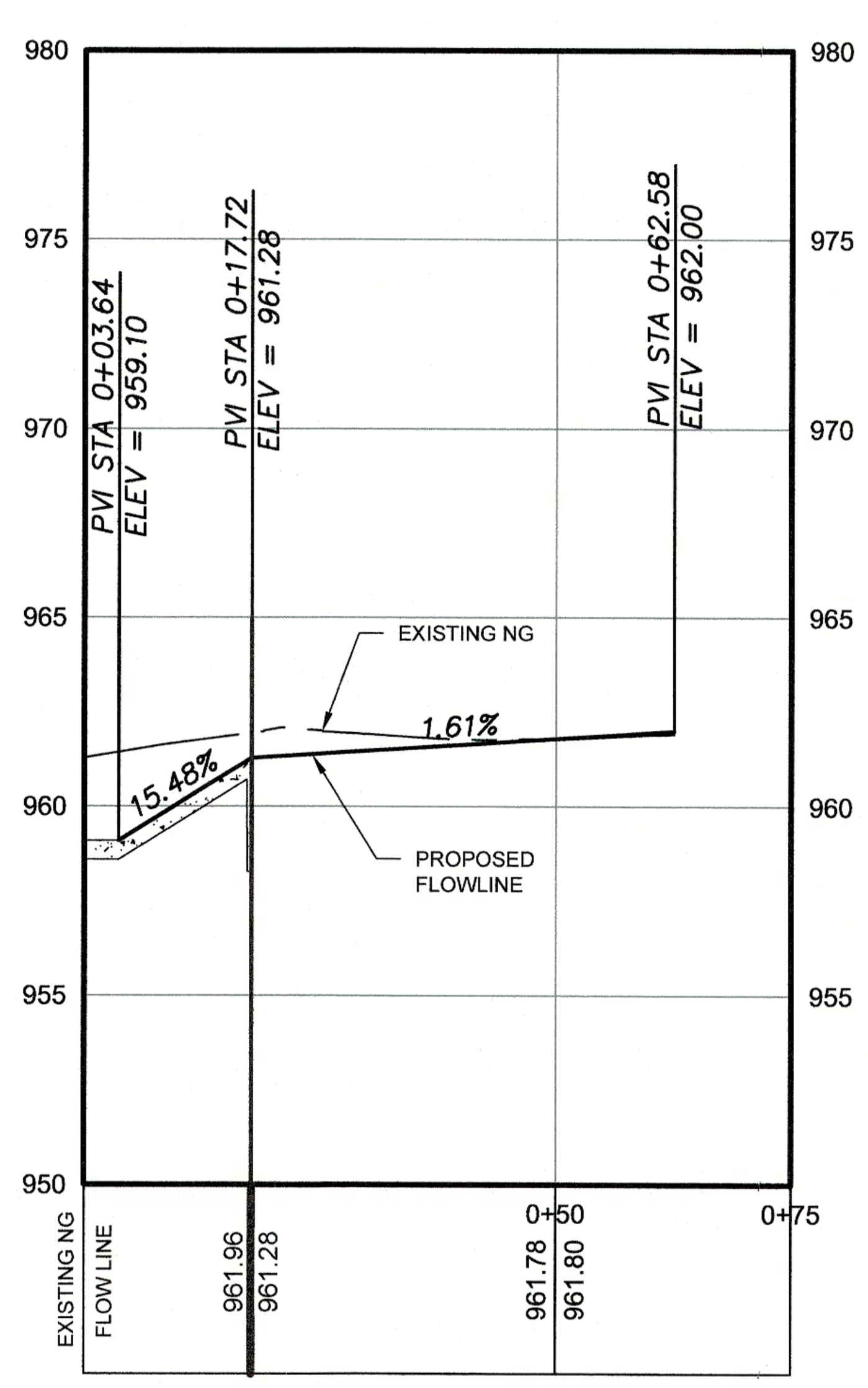
T.O.C.	TOP OF CURB
F.O.C.	FACE OF CURB
R.O.W.	RIGHT OF WAY
LT	LEFT
RT	RIGHT
G,E,T,CA	GAS, ELECTRIC, TELEPHONE & CABLE
BSL	BUILDING SETBACK LINE
S.W.	SIDEWALK
EXIST.	EXISTING
CVE	CLEAR VISION EASEMENT
ESMT	EASEMENT
(OA)	OVERALL
○	PROPERTY PC/PT
●	CURB LINE PC/PT
○○○○○	TIMBER GUARD POST
	HANDICAP RAMP
	WASHOUT CROWN

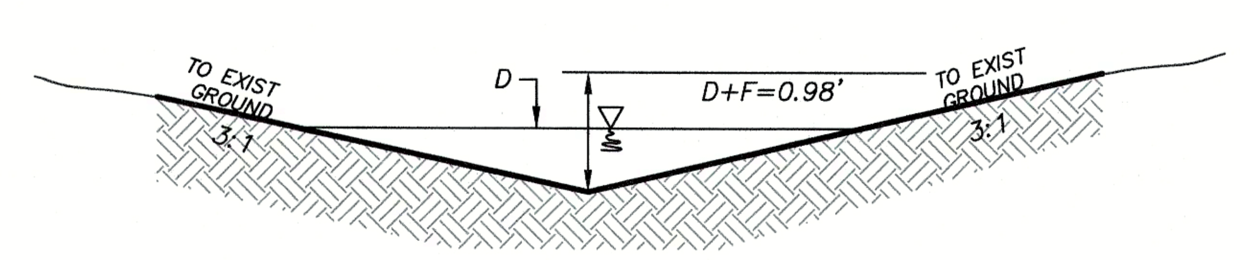
MIN. COMPRESSIVE STRENGTH OF CONCRETE NOT LESS THAN 3000 P.S.I. IN 28 DAYS.

NOTE:
BEFORE SEEDING OR SODDING, IMPROVED EARTHEN CHANNELS SHALL BE OVEREXCAVATED BY 8" AND REPLACED WITH 8" OF TOPSOIL.

COMPACTION NOTE:
THE FILL MATERIALS SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 8 INCHES THICK AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY TEST METHOD ASTM D 698 AT A MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM WATER CONTENT. EACH LIFT SHALL BE COMPACTED AND TESTED BEFORE PLACEMENT OF THE SUBSEQUENT LIFT.

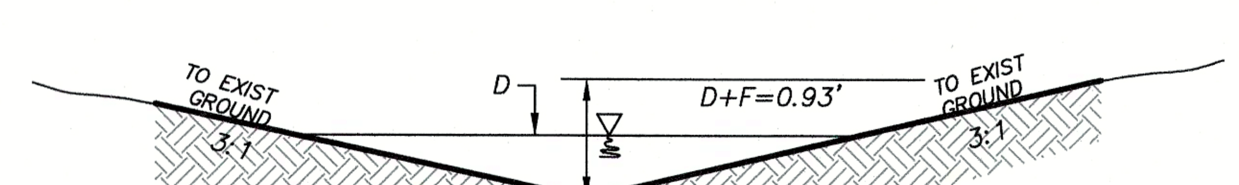
NOTE:
IMPROVED EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY FIVE PERCENT OF THE CHANNEL SURFACE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT THE CHANNEL FOR MAINTENANCE. (UDC APPENDIX H)





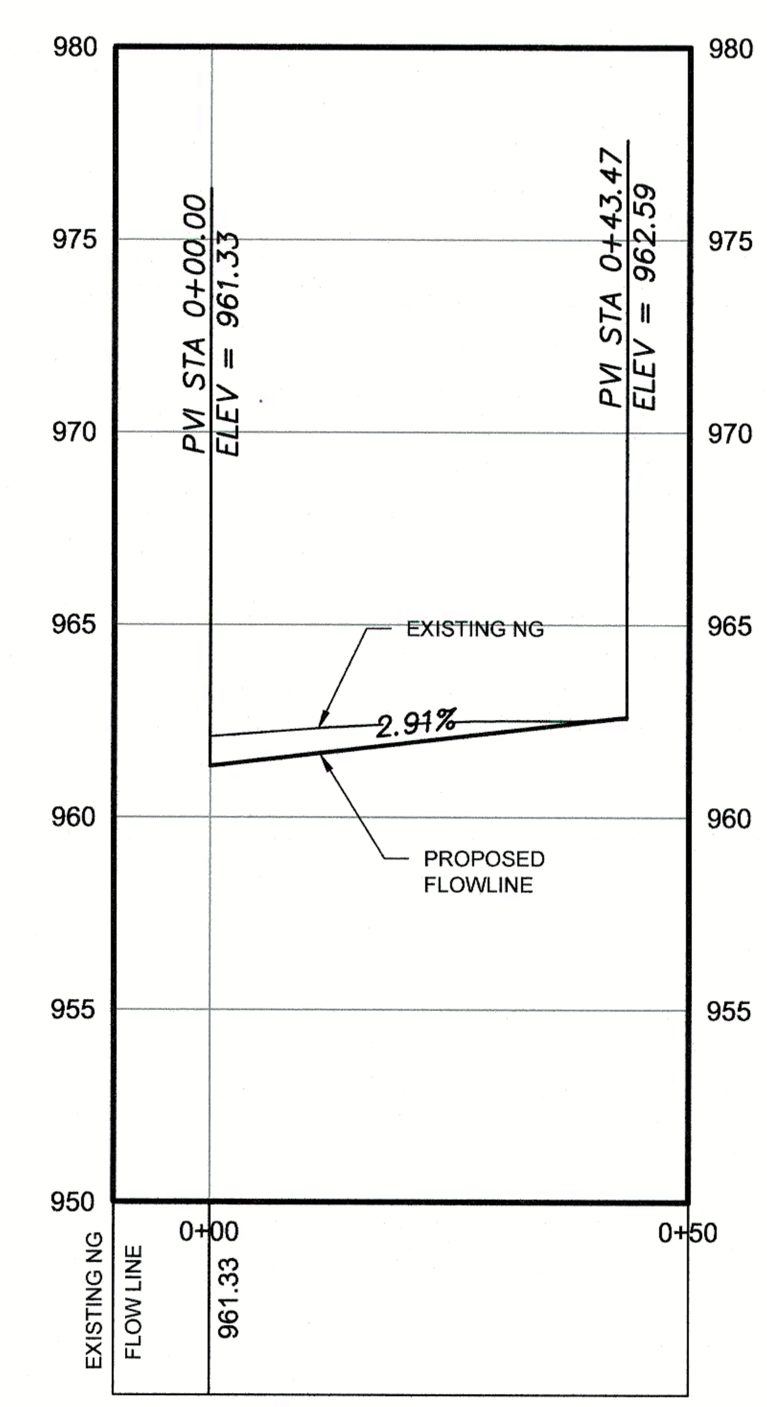
INTERCEPTOR A
EARTHEN CHANNEL SECTION
NTS

A = 0.691 ft²	V = 2.00 FPS
WP = 3.04 ft	D = 0.48'
Q_{25} = 2.28 cfs	W = 2.88'
N = 0.035	CD = 0.43'
S = 1.60%	R = 0.54 ft.



INTERCEPTOR B
EARTHEN CHANNEL SECTION
NTS

A = 0.555 ft²	V = 2.49 FPS
WP = 2.72 ft	D = 0.43'
Q_{25} = 2.28 cfs	W = 2.58'
N = 0.035	CD = 0.43'
S = 2.91%	R = 0.53 ft.



REVISIONS

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CONSULTING ENGINEERS
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Firm Registration No: F-159
TBPLS Firm Registration No: 10004100

FOR:
AGUDAS ACHIM CONGREGATION

INTERCEPTOR A AND B
SAN ANTONIO, TEXAS

PAUL A. SCHROEDER 57504 REGISTERED PROFESSIONAL ENGINEER
1-31-20

DATE: NOV 2019
Vertical Scale 1"=N/A
Horizontal Scale 1"= 20'
0 10' 20' 30'

SHEET 5 OF 5

PROJ NO. 1422-014

Jan 31, 2020 – 3:33pm
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DRAWN BY: DHS CHECKED BY: PAS APPROVED BY: PAS

Agent Authorization Form
For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I, Linda D. Moad
Print Name

Executive Director
Title - Owner/President/Other

of Congregation Agudas Achim
Corporation/Partnership/Entity Name

have authorized Paul A. Schroeder, PE, RPLS
Print Name of Agent/Engineer

of Vickrey & Associates, Inc.
Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Linda D. Moad — 11-14-19

Applicant's Signature — Date

THE STATE TEXAS §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared Linda Moad known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 14th day of November, 2019

MARYSOL HERNANDEZ
Notary Public, State of Texas
Comm. Expires 02-01-2023
Notary ID 131877744

Marysol Hernandez

NOTARY PUBLIC

MY COMMISSION EXPIRES: 02.01.23

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Agudas Achim Subdivision Units 1 and 2
Regulated Entity Location: 16550 Huebner Road, San Antonio, Texas
Name of Customer: Congregation Agudas Achim
Contact Person: Linda Moad Phone: (210) 479-0307
Customer Reference Number (if issued):CN 603673385
Regulated Entity Reference Number (if issued):RN 102749561

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☒ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment**. This payment is being submitted to:

☐ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☒ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	8.3 Acres	$ 5,000.00
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: Linda D. Moad Date: 2/20/20

TCEQ-0574 (Rev. 02-24-15)

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	*Project Area in Acres*	*Fee*
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*

☐ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☒ Other **WPAP Modification**

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 603673385		RN 102749561

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* *If new Customer, enter previous Customer below:*

CONGREGATION AGUDAS ACHIM

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees ☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated? ☒ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following:*

☐ Owner ☐ Operator ☐ Owner & Operator

☐ Occupational Licensee ☒ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:

16550 HUEBNER ROAD

City	SAN ANTONIO	State	TX	ZIP	78248	ZIP + 4	1695

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
( ) -		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC.)

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Agudas Achim Unit 2

23. Street Address of the Regulated Entity: *(No PO Boxes)*	16550 HUEBNER ROAD							
	City	SAN ANTONIO	**State**	TX	**ZIP**	78248	**ZIP + 4**	1695
24. County	BEXAR							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	16550 HUEBNER ROAD

26. Nearest City	**State**	**Nearest ZIP Code**
SAN ANTONIO	TX	78248

27. Latitude (N) In Decimal:	29.5272	**28. Longitude (W) In Decimal:**	98.2272

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	31	38.0	98	13	38.0

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
8661		813110	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

34. Mailing Address:							
	City		**State**		**ZIP**		**ZIP + 4**
35. E-Mail Address:							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
( ) -		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	PAUL A. SCHROEDER, PE	**41. Title:**	RESIDENTIAL DIVISION MGR.

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210) 349-3271		(210) 349-2561	PSCHROEDER@VICKREYINC.COM

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	VICKREY & ASSOCIATES, INC.	**Job Title:**	RESIDENTIAL DIVISION MANAGER		
Name *(In Print)* **:**	PAUL A. SCHROEDER			**Phone:**	(210) 349-3271
Signature:				**Date:**	12/5/2019